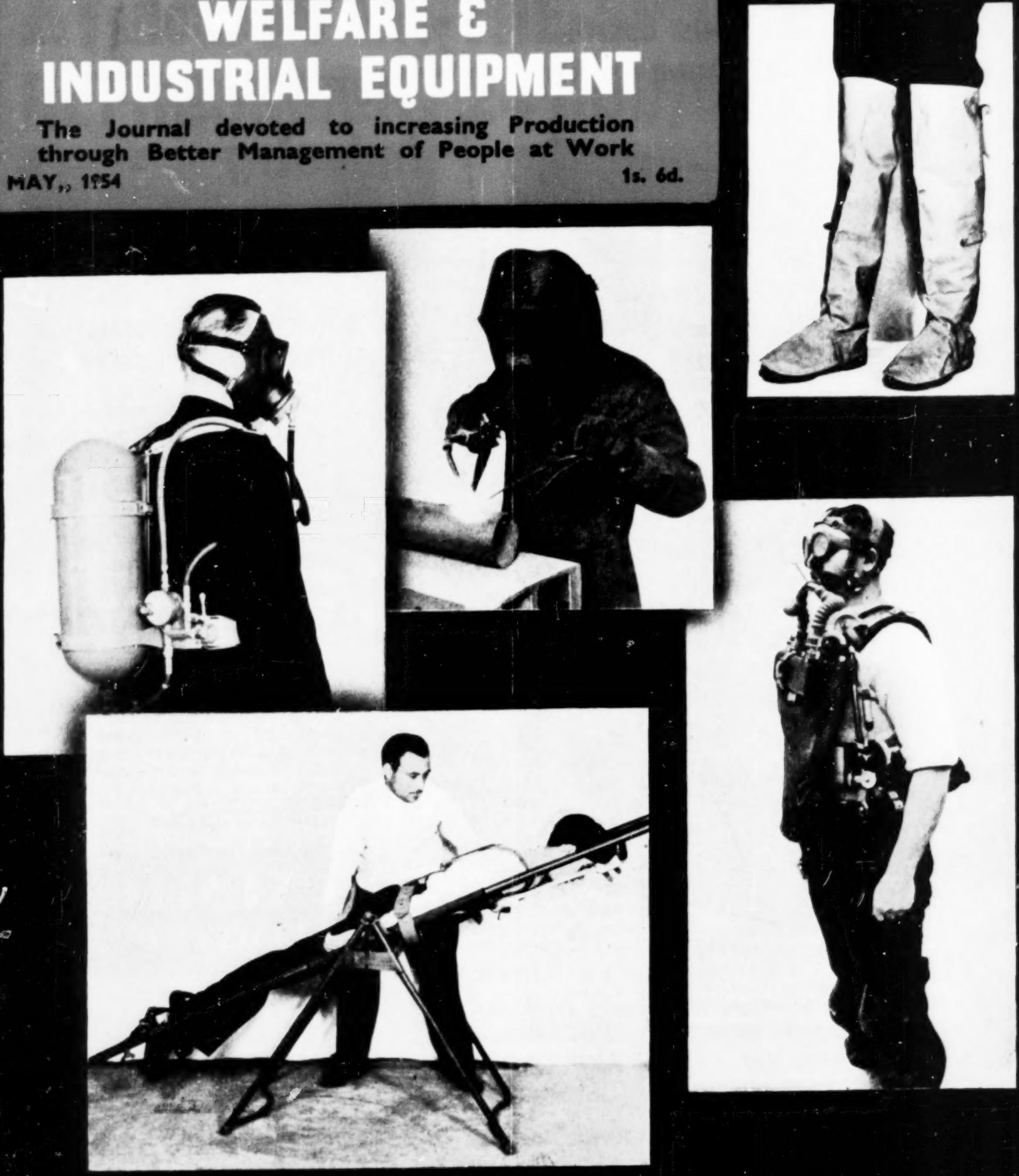
# PERSONNEL MANAGEMENT WELFARE & INDUSTRIAL EQUIPMENT

The Journal devoted to increasing Production through Better Management of People at Work

MAY,, 1954 1s. 6d.



**New Ideas on Industrial Safety** *(See page 517)*

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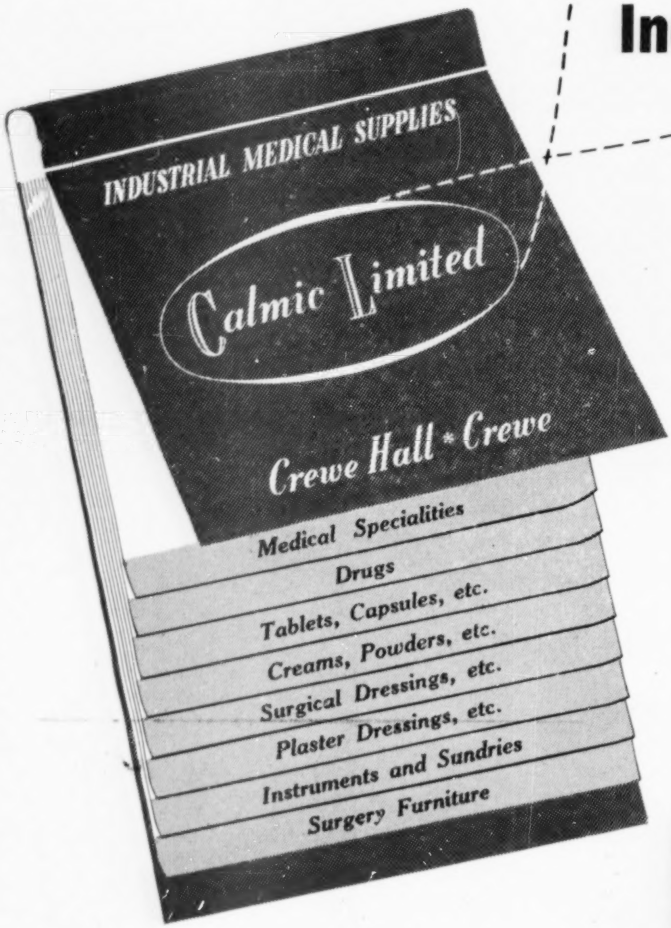
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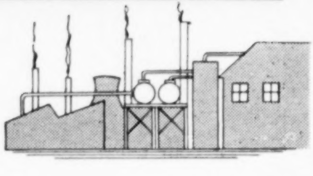

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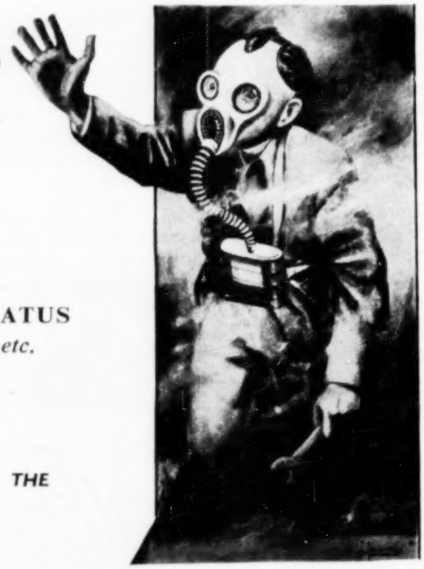

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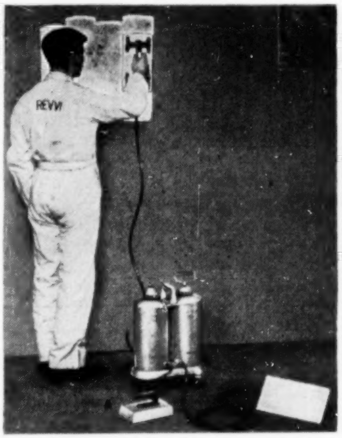

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# Personnel Management Welfare and Industrial Equipment

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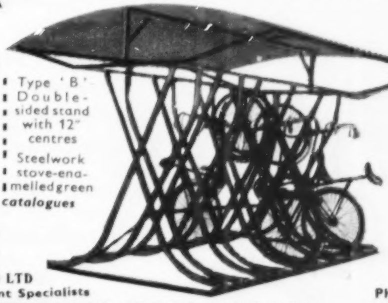

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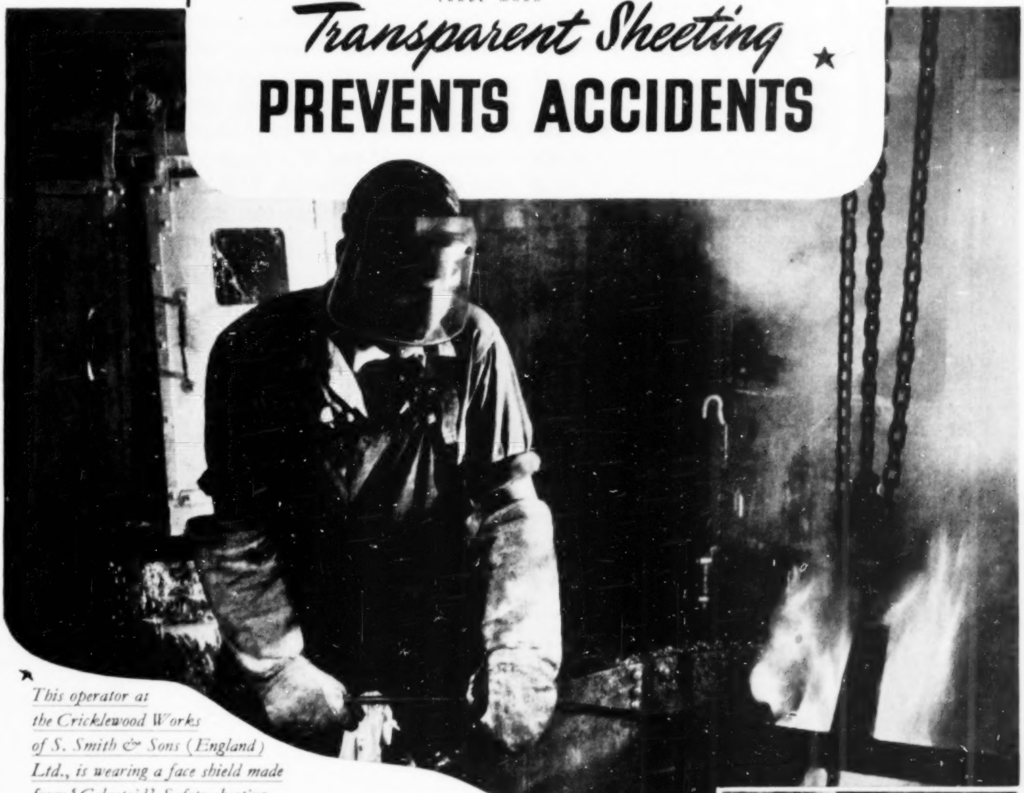

*This operator at the Cricklewood Works of S. Smith & Sons (England) Ltd., is wearing a face shield made from 'Celastoid' Safety sheeting by Safety Products Ltd.*

*In the machine shop at Smith's this capstan operator wears the 'Pulsafe' face shield for protection against flying metal splinters.*

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## You need smooth, clean-at-a-wipe

**FORMICA** REGD.
LAMINATED PLASTIC

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*Wall panelling, pillars and table tops of 'FORMICA'. Staff Restaurant, Shell Petroleum Co. Ltd.*

# QUICK FACTS ABOUT

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REGD.
LAMINATED PLASTIC

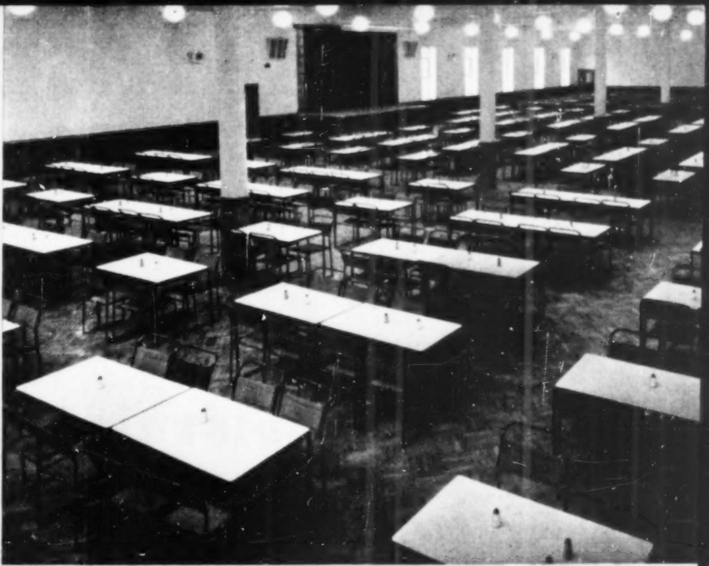
**WHAT IS IT?** A hard, smooth decorative board or veneer of paper and resins bonded under heat and pressure.

**HOW IS IT USED?** For any surface calling for the combination of hard wear and hygiene.

**HOW LONG DOES IT LAST?** Indefinitely. It is not affected by household acids, alkalis, oils, or stains. Resists heat (to 266° F.) impact, abrasion.

**IS IT EASY TO CLEAN?** A wipe with a damp cloth keeps it gleaming. Its non-porous surface gives dirt and germs no hold.

**HOW ABOUT COSTS?** Its cost per year of service is the lowest of any known material.



*Tables surfaced with 'FORMICA' in the factory canteen of Messrs. Coats, Paisley.*

*Tables with 'FORMICA' tops, Hughes Brothers Cooked Meat Factory, Aintree.*

## THE CLEAN FOOD BILL

Now that Clean Food is a matter of legislation, and not just common sense, you can face the Inspectors with confidence if you have gleaming 'FORMICA' surfaces. No less important than the assurance of the very highest standards of hygiene is the psychological effect on the staff working with gay, colourful 'FORMICA' surfaces. It means better morale and better health all round. Indeed 'FORMICA' surfaces are quickly becoming one of the hallmarks of 'a good place to work'.

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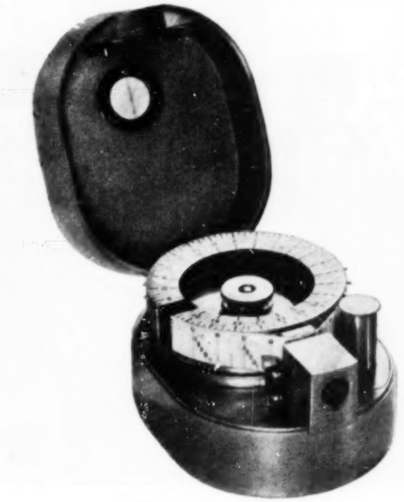

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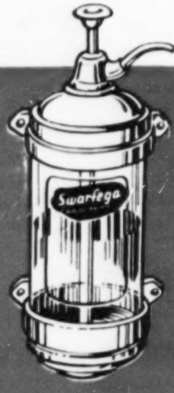

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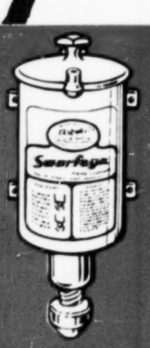

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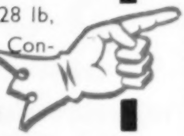

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*We are indebted to Siebe Gorman & Co. Ltd., who supplied the prints for our composite front cover*

# New Thinking on the Causes and Prevention of Accidents

**By C. A. OAKLEY**

*Adviser on industrial relations to Urwick, Orr and Partners Ltd., and lecturer in Industrial Psychology, University of Glasgow.*

**Much is known about how accidents happen. And much is being done, technically, both to prevent accidents and lessen the effects of those which do happen. Once again the annual RoSPA conference will deal with progress in this field. But the "Why" of accidents presents a deeper problem. Why, for instance, are some workers more prone to accidents than others? In this article an expert examines some of the important new thinking on this problem.**

INSTEAD of having to persuade workpeople not to have accidents, we should really be making it impossible for them to have accidents at all. The exhibition arranged this year by some forty firms in connection with the National Industrial Safety Conference gives further encouraging evidence of the technical progress being made towards reaching that goal. The regrettable fact remains that the large majority of accidents going to happen in British factories during 1954 will be caused by mistakes made by workpeople, and that we do not know how to stop them from making those mistakes.

Indeed, the part chance plays in determining whether a particular operative will have a major accident, or a minor accident or no accident at all, is a sobering consideration. H. W. Heinrich, the American safety engineer, put it this way. A man during a period when he is being closely observed, does 330 unsafe acts. On 300 of the occasions nothing happens, on 29 something trifling occurs, and the other time he has a bad mishap. To have avoided that one serious occurrence, however, all 330 unsafe acts would have had to be prevented, not just the act that actually caused the accident.

Much interest has been taken in this country over the possibility of some people having characteristics that make them more prone than others to have accidents. It is generally agreed that, in most factories, a very high percentage of the accidents is experienced by a considerably smaller percentage of the workers. The percentages could be of the order even of 60 and 20. Such percentages do not, however, give a reliable clue to the proportion of British people who are accident prone, because many such people avoid, either wittingly or unwittingly, doing dangerous work and so may not often have accidents.

## *A Subtle Distinction*

This point was, in fact, made rather strongly by W. R. Hollis when he said that some people who have a good many accidents are not necessarily accident prone, because they are exposed in their work to many risks, while others with what appears to be a good record may actually be prone but keep clear of danger. His point was that a distinction should be made between "the repeater" and "the prone," and that, as there are no standard conditions of risk and exposure, the fundamental question is, "Who acts unsafely most often?"

Although, in the study of accident proneness, consideration has been given to, for instance, dexterity, visual acuity, and sense of rhythm, most attention has been focused in recent years on reaction times. But while it might be agreed that the extensive use in factories of sensori-motor reaction tests would probably reduce accident frequency, it is conceivable that some of the people rejected would, in fact, never have had serious accidents. Firms are not in a position to "pick and choose" their workers at the present time, and, incidentally, it is no easy matter for factory personnel officers to give tests satisfactorily to adult workers—and particularly, of course, to those who have been in the firm's employ for years. Also there are too many uncertain factors on the emotional side to warrant hope that accurate predictability could be achieved by using controlled interviews and even by applying tests—for what they are worth—of characteristics like self-control and keeping one's head in a crisis.

**This, in turn, has led to the suggestion that, on the emotional side, the approach to accident prevention should be made not by selecting workers but by improving the social environment in the factory, the aim being to keep those who are emotionally liable to have accidents from becoming upset. Thus, for instance, nagging and bullying foremen are now being regarded as a menace to safety in the factory.**

Dr. T. T. Paterson has recently been using this approach. He speaks of "social stresses which give rise to emotional changes which, in turn, disorganise skilled activity," and suggests that social factors may be

## 5 Emotional Reasons for Accidents

1. **UNPLEASANTNESS.** An unhappy working environment—for instance, a nagging, bullying foreman—is now regarded as a menace to safety in the factory.
2. **MOODINESS.** Moody people run a greater risk of injury because of the unsettling nature of changing emotional states.
3. **REBELLIOUSNESS.** Records show that perverse, rebellious people also have bad accident records.
4. **RECKLESSNESS.** This often tied up with the desire to show off and leads to many mishaps on the shop floor.
5. **NERVOUSNESS.** Accidents often occur also in the case of jittery people who are over-anxious about their own well-being.

involved in as many as 80 per cent. of all industrial accidents. His concern has been with emotionally maladjusted people with unsolved personal problems who may, in normal circumstances, not have accidents, but who lie near a threshold. Having crossed it, perhaps because of a disagreement with their family or because of financial worries or of something irritating about their work, they become more liable to have accidents. It is quite possible, of course, that "moody" people in general are at times closer to this threshold than at others, simply because of changing surges in their emotional states.

Others, studying the relationship between emotional instability and accident frequency, have turned more to psycho-analytic approaches and have asked if some people get themselves involved in accident-producing situations to cover up or to get out of personal difficulties, or to win sympathy, or even just to attract attention. They may even like having little accidents, not perhaps that they go out of their way to have them, but they may not take adequate precautions to avoid having them. Another point about emotionally unstable people is that some of them, when troubled by their consciences, inflict punishment upon themselves; and so it is possible that certain accidents, as a current American theory says, can be regarded as "self-punishment mechanisms."

In spite of the hopes felt in some quarters about the extent to which "fact-finding and following up" might bring about substantial reductions in accident frequency, factory managers and others greatly concerned with this problem are increasingly asking us about these psychological approaches—although in mentioning what they mean by "psychological" they use general and vague terms, such as carelessness, recklessness, absent-mindedness, nervousness, obstinacy and stupidity.

## Two Types

Most factory managers put their employees in two groups. In the first are those steady, reliable people, who do their work methodically. They keep their benches tidy and their tools sharp and conveniently arranged. They are economical in the use of materials, they do not fuss or become confused, they are self-disciplined and need little supervision. In the other group are the less balanced people, who may be perverse and contra-suggestible, or reckless and chance-taking, or easily flurried and panicky, or excitable and slap-dash.

In the first group, it is often said, are to be found the people who rarely have accidents, in the second those who have many accidents. To some extent this is undoubtedly true. But it is by no means wholly true. The tidy worker is obviously less likely to hurt himself or other people by falling over things he has left about, or by putting his hand down on a broken piece of glass lying on his bench. He is, therefore, from the safety officer's point of view the more satisfactory kind of worker.

Yet it must be admitted that, although steady workers usually turn out good outputs, the exceptionally skilled person is not always distinguished by love of orderliness. Frequently, too, his exceptional achievements are attained partly by doing dangerous things other workers would not be willing or allowed to do. It is difficult, when speaking on accident prevention, to resist suggesting that, in the long run, the man who takes chances will eventually come by a mishap; but it must be admitted that there is not much evidence to support that point of view. Rather, in fact, would it appear that the man who takes chances

### Royal Society for the Prevention of Accidents
### CONFERENCE PROGRAMME

**FRIDAY, MAY 14th**

Afternoon

Delegates assemble at their hotels: dinner is the first function.

Evening

*Civic Welcome* by the Mayor of Scarborough.
*President's Address,* by Sir Charles Bartlett.
*The Executive and Accident Prevention,* by Sir George Earle.

**SATURDAY, MAY 15th**

Morning

*The Safe Use of Electricity,* by S. J Emerson, A.M.I.E., H.M. Electrical Inspector of Factories.
*The Legal Duty of the Employer to Prevent Injury to his Workmen,* by L. Bingham, Solicitor.

Afternoon

*Docks, Wharves and Railway Sidings,* by H. W. J. Brown, O.B.E., F.C.I.S., M.Inst.T., General Manager, River Wear Commissioners.
*Dangerous Chemicals in Common Use in Industry,* by C. W. Richards, Technical Service Department, General Chemical Division, Imperial Chemical Industries Ltd.

**SUNDAY, May 16th**

Morning

*Divine Service.*
*Flame Failure Devices on Industrial Gas Equipment,* by R. C. Haslock, M.Inst. F., North Eastern Gas Board.

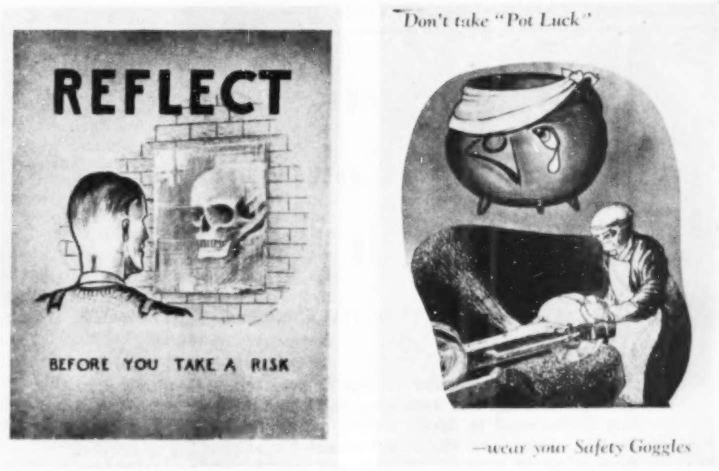
Question Time

at which written questions on the papers handed in by delegates will be dealt with by the Panel of Lecturers.

*The Conference Ends After Lunch.*

*knowingly* is often able to get away with them. The misfortunes come perhaps to those of lesser skill who try to imitate him. Similarly, it is quite possible that working speedily does not lead to as many accidents as trying to work speedily.

A useful first approach, when analysing mistakes of any kind, is made by first examining them under the headings of stupidity and perversity. This has its application in accident study. By stupidity is not meant lack of intelligence. While it is clear that, in some cases, accidents have been caused simply by people undertaking work that was too difficult for them, beyond their grasp, in the majority of cases avoiding accidents may have little to do with the person's level of intelligence. **To a large extent avoiding accidents is simply a matter of obeying rules implicitly, and this is where the solid, reliable and, may I add, unimaginative worker scores.** Some drivers of commercial vehicles would not be included among the brightest citizens, and yet they often have excellent accident records. On the other hand, some automobile drivers are men of proved high intelligence, but are nevertheless notoriously dangerous drivers. Perhaps the explanation is that they give insufficient attention to what they are doing. They regard themselves as too intelligent to concentrate on routine tasks which could be done, if they were so disposed, largely by habit. But they have not set out to form these habits, and, finding the jobs dull, allow their thoughts to wander away. Their inattention then involves them in mishaps.



These ingenious drawings are reproduced by courtesy of *F. H. Lloyd and Co. Ltd.*, steelfounders of Wednesbury, who have done outstanding work in making their workers "safety conscious."

## *Awkward Specimens*

Perversity is, of course, closely linked with the contra-suggestibility which is encountered so often in human relationships in factories. Unfortunately, many people are inclined, when told to do something, to do something quite different. In the field of accident prevention, any suggestion of contra-suggestibility is, of course, particularly unwelcome. Perversity is, in fact, to be seen also in many improper attitudes to work, and not merely in wilful disregard of instructions. Unco-operation, rebelliousness, disloyalty and intolerance are all tinged with it. Many factory managers believe that people whose records show them to be for example, quarrelsome, insubordinate and unable to get on with their supervisors or with the main body of workers also have bad accident records. Such impressions are, of course, difficult to verify—by what standard, for instance, is quarrelsomeness to be measured? But they are widely held throughout industry, although I am sure no one would suggest that all quarrelsome people are particularly liable to have accidents.

Recklessness is always being brought up in discussions about accidents, the implication being that taking entirely unwarranted chances brings about many mishaps. Why are the chances taken? Only too often the explanation seems to be that the worker was showing off, for the motivation is clearly of a different kind from that which prompts the risks indulged in by some highly-skilled workers. Such exhibitionism is particularly—but by no means exclusively—to be found among young people. It is unlikely to be eradicated merely by reproof and punishment.

The suggestion has been made that propaganda should be directed particularly at people who are inclined to be reckless, and that it should be intended to inculcate greater caution. All that is really wanted is to make people cautious when caution is needed. It is not the intention to frighten them. Nervous people, fearful for their wellbeing, are perhaps particularly likely to have accidents. How far reckless people can really be influenced by propaganda is, as we have already remarked, debatable. Setting out to show them how foolish they are being is unlikely to achieve much. There is a growing feeling, indeed, that accident prevention proaganda should not be aimed at self-preservation at all. Perhaps instead of exhorting people to be good, or scaring them not to be bad, the emphasis should be put on conformity—making them want to do something because they think it is what all their colleagues are doing too.

To some extent it can be said that people who often get flustered or excited (or both) and those whose behaviour is unpredictable, so that they do something one way for a moment or two and then for no apparent reason do it another way, all come out of the same drawer. Possibly, accident-prevention propaganda should be focused on them, too. Certainly there is an unsubstantiated impression in industry that they are responsible for many mishaps, and especially for those of a rather "silly" kind. On the other hand, some people who have these weaknesses—even if aware of them only subconsciously—are reluctant to undertake work that might be dangerous. **Indeed, there may be a cowardice factor in accident causation and prevention which**

(*Continued on page* 541)

FOR A REVIEW OF NEW PRODUCTS AT THE RoSPA EXHIBITION, SEE PAGE 535

### *Reducing Noise in Industry—1*

# How Acoustics Affect Working Conditions And Output

**By G. WITTENBERG, A.M.I.Mech.E.**

**This is the first of three articles dealing with the problem of noise in industry and reviewing the latest methods by which it can be reduced to levels which neither impair efficiency nor health. Here, the writer introduces his subject by a general assessment of sounds, pleasant and unpleasant, and tells how these are intimately tied up with the human factor in industry.**

ARTICLES in the January, 1954 and February, 1954 issues of this journal showed how colour and light properly applied in the factory could raise morale and increase output. The same is true of noise reduction and it can be strongly argued that in several industries this is today one of the most pressing problems. There is a number of reasons for this, but by far the most important has been the increase in the power and speed of modern machinery and equipment. Noise affects different people in different ways. Not only does the sensitivity of the human ear vary with age, general health and other factors, but the same person may react differently to similar sounds according to mood, time of day, etc. Generally speaking, high-pitch sounds are more objectionable than low-pitch sounds and are judged louder than they really are. A thin, high squeak can "get on your nerves" or "puts your teeth on edge," whereas a much louder but low drone may not even be noticed after a while.

Noises which are loud or unpleasant can affect the efficiency and output of workers. One large electrical manufacturer in the United States, for instance, has calculated that an increase in noise level of one decibel (about the smallest increase that can be detected by the human ear) costs the company about **$100,000** per year. This figure is, of course, an average reached by dividing the savings obtained by the reduction in noise level achieved to give a mean figure per decibel. The problem of compensation for occupational deafness is, in fact, at present very topical in the U.S.A. due to the particular legal provisions in that country,* and it is interesting to note that, according to one British medical opinion, **43** per cent. of riveters have some degree of deafness in both ears compared with only **6** per cent. to **9** per cent. in quieter trades. Another group of doctors consider that about half the workers under thirty in noisy industries are suffering to some extent from defective hearing.

Should British laws be brought into line with American practice, it would, therefore, appear that the value of compensation involved might well be very large. In this connection, it is worth bearing in mind that one authority has compiled a list of **400** noisy trades in which some damage to workers' hearing may be expected to occur if due care and attention is not taken. This figure of **400** is a far cry from the few trades, such as riveting, boiler-making, drop stamping and printing, which are traditionally regarded as being noisy.

Occupational deafness is only the extreme and outward manifestation of the effects of excessive noise. It is generally agreed that human beings can accustom themselves to virtually any noise level at a price. If the noise level is high enough, this compensation takes place by a loss of hearing such as has been described already. Before this happens, however, the subject makes a mental compensation involving greater concentration and expenditure of nervous energy. Even with such lower noise levels, there is a temporary loss of hearing acuity over the period of exposure which is made good again if the ear is rested during a subsequent period of relative quiet.

This temporary loss of hearing in noisy surroundings was strikingly demonstrated by one large automobile manufacturer who employed an inspector to check the noise emitted by rear axles before these assemblies were passed for use. After some time it was found that the percentage of rejects on this test had dropped practically to zero. Investigation showed that the shops were holding back all noisy axles until late in the day, when the inspector's hearing had been sufficiently dulled to pass these defective axles as acceptable. The management immediately armed the inspector in question with a modern sound level meter, which enabled the axles to be checked on a strictly objective basis.

An even more serious effect on working conditions than that of steady noise is caused by intermittent noise. It was found by Dr. Foster Kennedy,* for instance, that the intercranial pressure in a person subjected to a loud, brief noise rose as much as **400** per cent. Moreover, further energy is lost since the human ear is provided with a protective mechanism similar to that employed to protect the eye from flickering lights. In the eye, there is a contraction and dilation of the pupil in phase with the flashing of the light. In the ear, there is a tensing and relaxing of the auditory muscles protecting the fibres of the auditory nerves from the effects of discontinuous noises. A sudden, loud noise does, in fact, set up a similar reaction to that associated with a severe fright and it is a reasonable assumption that lesser noises give rise to similar but lesser reactions.

So far, we have discussed the

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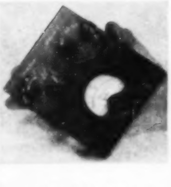
*The New York Workmens' Compensation Board paid out last year $272,072 from this cause alone to claimants in industries as different as transport, manufacturing, civil engineering and distribution.

*"British Journal of Industrial Medicine" No. 2 (1945) P. 115.

negative aspects of the problem of noise. **There is, however, no doubt that noise reduction can also be expected to result in an actual increase in production. There is a definite correlation between sensible improvements in working conditions and increased output.** Typical of such conditions are food, warmth, light and colour. Noise would appear to be a natural addition to this list and it is somewhat surprising that it has received so little attention until recently. The actual benefit which may be achieved by noise reduction will depend greatly on the type of noise and, as pointed out above, on whether the noise is constant or not.

The term "reduction" must not be taken too literally. The human ear is not merely an instrument measuring noise purely quantitively, but is influenced by psychological considerations which take into account the quality of the noise. An interesting example of the effect of "quality" is given by the relaying of the "Music While You Work" programme by the B.B.C. The sound level in the factory is almost always increased by the introduction of this additional sound, but because the workers like this sound, it actually has a beneficial influence on output. On the other hand, a noise which is not as loud but is considered by the workers to be unpleasant, such as the squeak of a belt, invariably leads to a reduction in output. A pleasant sound at the right time tends to mask background noise and to relax the operator. In addition, *provided that the tempo of the music is correctly timed,* it automatically tends to induce a rhythm into the working cycle. It is, therefore, important that the music be properly adapted to operators whose speed is governed by the rate of output of other machines or assembly lines. (In some of the larger American works, music of a type and tempo specially adapted to various departments is broadcast separately.) At the same time, it must always be remembered that the condition of the hearer is just as important as the quality of the sound. For instance, an operator who would consider a loud relay of music at 4 p.m. most pleasant, would unhesitatingly condemn the same music at 4 a.m. as an awful nuisance. **This subjective approach to noise is indeed one of the biggest obstacles to its true understanding and control.**



A sound technician uses this sound level indicator (left) to test the effectiveness of various mats in reducing the noise from a typewriter. This instrument can measure a pin dropping at several yards distance.
*(Courtesy of Dawe Instruments Ltd., Ealing, London, W.5.)*

### NOISE VALUE OF VARIOUS SOUNDS

| | DECIBELS | |
|---|---|---|
| | 120 | Threshold of pain |
| Deafening | 110 | Thunder, Artillery<br>Nearby riveter<br>Underground train |
| | 100 | Boiler factory |
| Very Loud | 90 | Loud street noise<br>Noisy factory<br>Lorry unmuffled |
| | 80 | Police whistle |
| Loud | 70 | Noisy office<br>Average street noise<br>Average wireless |
| | 60 | Average factory |
| Moderate | 50 | Noisy home<br>Average office<br>Average conversation |
| | 40 | Quiet wireless |
| Faint | 30 | Quiet home or<br>Private office<br>Average auditorium |
| | 20 | Quiet conversation |
| VeryFaint | 10 | Rustle of leaves<br>Whisper<br>Sound-proof room |
| | 0 | Threshold of audibility |

The decibel scale is logarithmic, which means that a noise must be increased ten times to raise its decibel value from, say, 50 to 60.

The extent to which a given sound will affect output is based quite largely on the extent to which speech communication is important for that particular job. This can best be illustrated by comparing jobs in a typical office, in a machine shop and in the press room of a newspaper.

In an office, it is usually essential that conversation in a quiet tone of voice, such as dictation or instructions, shall be readily understood without any possibility of error. Any noise which causes appreciable masking of speech must, therefore, be considered a potential cause of lost output and of mistakes. The noise most liable to cause such masking will clearly fall within the same frequency range as normal speech, that is to say, between 500-5,000 cycles per second. Within this range, and particularly in the most important central region of it, even quite low noises, such as would otherwise cause little actual discomfort, will make clear understanding of speech difficult. The noise level in an underground train is not unpleasantly high-pitched but it is sufficiently loud to make the communication of speech into an effort requiring the raising of the voice, speaking close to the listener's ear and enunciating words very clearly.

## *More Skill, Less Speech*

Conditions in a train resemble quite closely those experienced in the average machine shop. Here speech is important largely as a method of transmitting orders and instructions from the foreman and chargehand to those on the machines. If these machinists are experienced and the work to be done does not present any exceptional problems or difficulties, it is possible to run such a shop with very little speech. Under these conditions, the losses incurred through noise are mainly those associated with nervous fatigue and tension in the operators.

In the pressroom of a modern newspaper, communication is almost impossible. For skilled labour, this is not of vital importance, since each man knows exactly what is required of him. It is, however, clear that no training can be carried out while the presses are actually running and special measures must be taken to overcome this problem. In addition, the human voice is valueless in giving warnings and resort must be had to mechanical devices such as emergency bells.

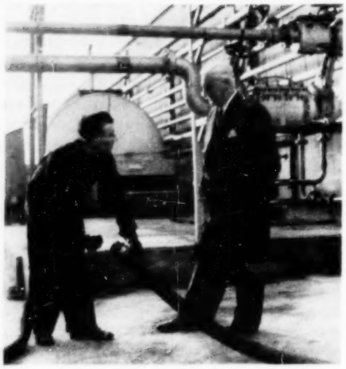
*(to be continued)*

**POLICY**

# A Formula for Good Communication —

**By M. H. IVENS**

*Employee Relations Dept, Esso Petroleum Co. Ltd.*



Good communication hinges on the manager on the spot.

**A year ago the *Esso Petroleum Co.* set up a Communication Department which has since shaped a definite formula for a two-way flow of information between workers and management. Many techniques go to make up this formula but personal contact—the face-to-face approach—is the basic factor. And the story of the Fawley Refinery Project, which begins on the page opposite, shows just what this type of communication can accomplish.**

DURING May, 1953, Esso Petroleum Company set up the first Communication Department in this country. The lessons learned during the experimental period following the creation of the department may be useful to other companies who are considering dealing with the problem of communication—undoubtedly one of the most important facing industry today.

Esso feel that before formulating a communication programme there is a first important step to be taken. It is to carry out a comprehensive review of the methods of communication used in the company (and of course their efficiency), and also to decide on major communication problems and needs. Having done this, the possibilities for action will probably appear so vast that one may well be tempted to imitate the famous musketeer of Bret Harte who jumped on to his horse and rode off in all directions at once. In so wide a field as communication, therefore, certain priorities must be established. One of the first will be to publish a company communication policy which can be understood by all employees.

Esso's communication policy is brief. It states that all employees should be fully informed on the company's organisation and actions, so that they may understand, appreciate and interpret them correctly.

The second point of the policy is that management should likewise understand, appreciate and correctly interpret the attitudes, reactions, feelings and opinions of employees.

And finally it states that communications are the direct responsibility of line management. The function of Esso's Communication Department is to advise and assist them with regard to communication needs, techniques and presentations.

**This third point is a most important one. Communication must on no account be regarded as the job of a small Head Office department. No company can establish good communications unless management regard it as one of their most important duties.**

One method of bringing this home to management is to include communication in management training. Esso have been holding a series of residential conferences at their training centre. These conferences, "Principles of Management" and "Basics of Supervision," have been attended by managers and supervisors from throughout the organisation, and the sessions on communication have proved invaluable, not only in putting over the subject as a basic management responsibility, but also for discussing current problems.

Undoubtedly the most important channel of communication is that of the normal line organisation. If one recognises this, it becomes apparent that the management-supervisory link is probably the most vital one in effective two-way communication.

Joint consultation, employee newspapers, booklets, films, suggestion schemes and visual aids are all very useful means of passing information, attitudes and ideas from the top to the bottom, and from the bottom to the top of an organisation. **The most efficient means of communication, however, still remains that of personal contact—the face-to-face approach. Employees can only understand and correctly interpret company policies and actions if management and supervisors are doing an effective job as communicators.**

In the same way, effective communication from employees to supervisors, and from supervisors to management, is necessary if those at the top are to be able to understand the problems and attitudes of their employees. Training in communication, is therefore a vital preliminary step in any formal programme. Another major problem is to discover what employees really want to know (not merely what you think they should know), and also to unearth communication problems and bottlenecks.

Obviously the man in charge of communication must be in close touch with all grades of staff. But more than personal contact may be required, for example, to discover what employees want to know. To obtain this kind of information Esso have been making use of group

### 6 POINTS OF COMMUNICATION

1. *All employees are told what the firm is doing and why.*
2. *In turn, management seeks the views and feelings of the employees.*
3. *The manager on the spot is the main link in good communication.*
4. *Executive grades are trained in the art of communication.*
5. *Workers are told what they want to know as well as what they should know.*
6. *Group discussion, visual aids, films, joint consultation, etc. are all part of the communication technique.*

surveys followed by discussion.

The method used in these surveys is to take a number of groups of employees and to give them personally a number of questions on a particular subject. The results are worked out promptly on the spot—and handed to the members of the group who are invited to discuss them. These discussions generally provide even more valuable information than the actual surveys.

The group survey and discussion method has a number of advantages. First of all, it helps to break the ice with groups who are interested and stimulated by being asked a number of frank questions. It also assists to make them think hard on the subject on which the survey is based. For example, if you ask a man what sort of information he would like to hear about the company, he will probably look at you blankly. If, however, you ask him a number of frank questions on this subject, it will tend to loosen his mind, and stimulate him when it comes to discussion. Another advantage of this method is that it gives you an opportunity to discuss with groups *why* they arrived at a certain average for a question.

If adopting this method, it is advisable to try out a pilot survey so that you can discover any difficulties. Esso's pilot survey dealt with the reactions of various groups of employees towards the house journal. Although the survey was on a limited scale, it provided valuable information.

Subsequent group surveys and discussions have been held on "What do employees want to know?" and "How do employees feel about joint consultation?" Surveys and discussions have also been conducted with a number of management and supervisory groups on questions of morale and on communication problems.

Another interesting experiment has been to let employees do the communicating on behalf of the company. Posters issued throughout Esso—whether on safety or suggestion schemes — have been designed by employees. Before publicising a subject, competitions are held for the best ideas and design to illustrate it. This means that a safety poster will appear with "Designed by Driver J. Jones" in prominent letters, and this certainly helps to dispel the impression that the publicity is coming from some impersonal machine in Head Office.

# —and Good Communication in Action

**By MARGARET BROWN**

*Department of Management Studies,*
*London Polytechnic*

**If any doubt did exist in British management circles as to the value of effective communication, it has been dispelled by the story of the Fawley Refinery published a few weeks ago. By keeping the workers in the picture and gaining their interest and respect, a vast industrial plant was completed well ahead of schedule. The writer tells here how the management went about the job of winning and maintaining a 100 per cent. response from the workers.**

AMERICAN production methods have been described in great detail for us in the reports of the many Productivity Teams which have visited the U.S.A. Industrialists in this country, while agreeing with the soundness of many of the methods described, have too frequently added, "but of course these methods wouldn't work over here."

Now we have tangible proof that these methods have worked, and worked outstandingly well in one enterprise over here. A big new refinery was built between July 1949 and September 1951 for the *Esso Petroleum Co. Ltd.*, at Fawley, Hants, and finished three months ahead of the scheduled date. Construction was carried out by two American companies, the *Standard Oil Development Co.*, responsible for the master planning and design, and the *Foster Wheeler Corporation, N.Y.* (with its British subsidiary the *Foster Wheeler Co. Ltd.*) as the main sub-contractor doing the actual construction work.

American managers and supervisors using American methods combined with British labour to make the job an outstanding success. Time schedules were beaten and labour difficulties negligible. The fascinating and impressive story of how this was achieved is told by A. P. Grey and Mark Abrams in the B.I.M. pamphlet "Construction of Esso Refinery, Fawley," published in March. This factual survey of the work at Fawley should be read by all managers. **Four clues to the success of the enterprise immediately suggest themselves: good planning, good leadership, good communications and good relationships with the trades unions.**

The *Standard Oil Development Co.* began to plan the job two years before it was actually started. Details, almost of day-by-day operations, were worked out, together with a manpower budget. Only one major change was made subsequently—when the finishing date was put forward three months. The Productivity Team on building reported how close a liaison there was between the paper planners and the practical men in the U.S.A. The same close liaison was maintained on this job, U.S. designers supplying many more detailed drawings than British designers usually do. Actual progress, including the use of manpower, was compared each month with the monthly estimate, and design engineers on the site could see at once if there was a falling off and remedy it. Control of achievement was the major feature. Materials and costs were controlled in the same close way by an elaborate coding system.

This careful planning was one aspect of the inspired leadership which Bob Cole (*Foster Wheeler's* project manager) helped by the S.O.D. senior engineers gave to the whole project. The tremendous emphasis he put on good communications was another. Bob Cole spent every available minute he could spare out on the site so that he was well informed about the progress being made. This detailed grasp of developments is reflected in the "Daily Instruction Bulletin" which he issued to his staff. Items such as "Mallory, what happened to the radial saw?" or "ten tippers were idle at 8 o'clock this morning with no drivers, at 8.05 there were still

## Features of the Fawley Project

1. A total of 10,380 men were engaged over a period of twenty-five months, yet only .006 per cent. of man-hours were lost through disputes.
2. Success was based on good relationships with the trades unions, good planning, good leadership and good communication.
3. All workers were kept up-to-date not only on their specific jobs but on the project as a whole.
4. Supervisors acted as (and were treated as) helpers, not as overseers looking for a chance to criticise. They worked the same hours as the men and were always on the site, not in the office.
5. Social distinctions were reduced without authority being impaired.
6. The result! A £37,500,000 refinery capable of turning out 6,500,000 tons of petroleum products annually, was completed three months ahead of schedule.

six. . . ." were visible signs of his energetic and forceful leadership.

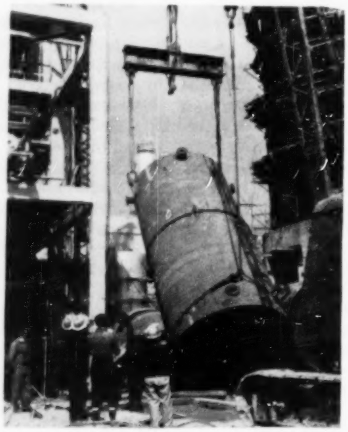
Bob Cole believed, too, in keeping the whole supervising staff fully informed: **"the principle adopted was that each individual should be kept up to date, not only on the factors that affected his own immediate responsibility but on the job as a whole."** The Daily Instructions Bulletin went out to all supervising staff. It contained sometimes as many as fifty items. Subjects dealt with included priorities for work to be done, announcements of supplies arriving, requests for information on progress, messages of appreciation, and reminders about rules, etc. These instructions were supplemented by a regular Friday progress meeting which covered the same kind of ground and which gave all supervisors a chance to raise points and make announcements. Bob Cole expected his supervisors to maintain the same close communications with their men, so that everyone should know what they were doing and why. One supervisor, for example, took his men on a tour of the whole site in a lorry so that they could see where their job fitted with the whole.

Bob Cole. He "mucked in" with his men, yet his authority was never questioned.

The American supervisors placed the same value on personal leadership on the site as did Bob Cole. They appear from the men's remarks "to have been regarded as helpers rather than overseers waiting for an opportunity to criticise," their main function being to see that the job was not held up for lack of materials, manpower or skill. "They muck in," said one worker, "they don't ask you to do anything they wouldn't do themselves; they will take a tool out of your hands and do the job themselves—an English foreman wouldn't do that."

Thus they encouraged by example. They worked the same hours as the men and were always on the site, not in the office. The men felt they could approach Bob Cole direct or their supervisors with any problem; social distance was minimised. Perhaps in this connection "their strange and colourful clothes, fur-collared coats, brilliant pullovers and a variety of strange headgear" also helped. In this way there was established "a pattern of friendly informality and minimum stress between supervisors and men **without in any way detracting from the supervisors' considerable authority."** This authority was derived from their high status and pay and their extensive responsibilities and above all from their own skill and characters.

The management created a pattern of leadership which deserves our careful study. Social distance between Cole and his supervisors and the supervisors and men was consciously reduced, but this did not impair their authority—in fact a strict discipline was maintained.



Americans and British watch a waste heat boiler being lifted.

Effective leadership was achieved through gaining the interest and respect of the men. Men who knew how to do a job were left to get on with it: those who did not know were shown and helped by the supervisors and the "why" of it all was explained to everyone. Thus effective working teams were built up and maintained.

This approach to the human relations aspect of the work is shown, too, in the "unusually smooth" co-operation which existed between the Confederation of Shipbuilding and Engineering Trades Unions and the management. Mr. Jones, the area secretary, said he got the men to see Fawley as a joint undertaking. Mr. H. R. Nicholas, national secretary of the Transport and General Workers Union and one of the speakers in the recent B.B.C. debate on Fawley, emphasises that this 100 per cent co-operation with the trades unions is one of the most significant reasons for the success of the project

"Many managements are prepared to accept us as necessary ends," he said, "but this is very different from actively welcoming the contribution we can make."

Thus, for example, a full-time convenor was given an office and shop stewards were allowed to inspect membership cards. A shop stewards' committee met fortnightly and a site executive committee once a week.

This position was undoubtedly helped by the fact that Foster Wheeler had negotiated (with the approval of the S.O.D.) a separate contract on wages and conditions, with the C.S.E.T.U. **The basic wage was high but not unusually so. There**

(*Continued on page* 541)

# R.S.A's 200 Years' Work for Industry

### By A SPECIAL CORRESPONDENT

THE Royal Society of Arts this year celebrated its two-hundredth anniversary. Although its normal title might indicate that this body is essentially concerned with the more esoteric human skills, the briefest perusal of its long history demonstrates that it has always interpreted "Arts" in the widest sense. In effect the Society's activities have exercised a marked influence on industry and commerce and upon the lives of all engaged therein.

In this field, R.S.A. achievements have fallen into four main channels—the stimulation of raw materials for industry; the encouragement of inventions and new manufacturing techniques; the improvement of working conditions and industrial health; and publicity and stimulus for all attempts to improve either quality or design.

It was the incentive motive that actually led to the Society's formation, and to William Shipley, a Northampton drawing master (who was impressed by the way a prize list at a local horse fair had stimulated everyone's interests) goes chief credit for founding *"The Royal Society for the Encouragement of Arts, Manufacturers and Commerce,"* and becoming its first secretary. Down the years R.S.A. prizes have been awarded for accomplishments in many branches of human activity, and its examinations in many commercial and technical subjects have often anticipated official action in these spheres by many years.

Our modern Factory Acts, for instance, owe much to R.S.A. influence, and in recent times the Society contributed greatly to the formation of the Council for Industrial Design. Examinations in shorthand and typewriting are still maintained, and a Bicentenary Medal to be awarded annually in the cause of good design will mark this latest milestone in the Society's career.

Schemes for re-afforestation (including the growing of oak for shipbuilding), the introduction of new crops in Britain and elsewhere, designs for a lifeboat and the forerunner of the modern fire escape lie also to the Society's credit; and it was an R.S.A. prizewinning invention of G. M. Smart in 1805 that sounded the death-knell of the chimney-sweep's-boy system.

But on the threshold of the third century of its story there is no noticeable tendency in the R.S.A. towards resting on its well-won laurels. It is only a few months ago since, at the opening of the 200th session the Duke of Edinburgh, its President, aptly summed up the Society's policy when he said, ". . . it is not concerned with doing things in a different way, which some people call progress; it is concerned with doing practical things in better ways—which is real progress"—and that is the R.S.A. mandate for the future.

## New Health Centre

A NEW health centre has been opened at the Avonmouth, Bristol, works of the *British Oil and Cake Mills Ltd.* Facilities include a consulting room, fully-equipped treatment room, and separate provision for chiropody and lamp treatments.

Dr. J. J. O'Dwyer, chief medical officer, *Unilever Ltd.*, said at the opening ceremony that the centre would serve employees from the most junior to the most senior. B.O.C.M. area manager and director, Mr. R. H. Robinson, said the new centre replaced an older building and that great improvements had been made. Last year's sickness rate had been only 4 per cent., which he thought compared very favourably with other industries. Plans were in hand for still further improving the dust problem.

## Industrial Tours

ON APRIL 1 the 100,000th visitor since August 1946 passed through the *Austin Works* at Longbridge, Birmingham. This total represents an average of 1,100 visitors a month from every country in the world. To mark the occasion, *Austin* staged a special welcome for all visitors who were presented with mementos of their visit. Mr. C. Robinson of Bradford, who brought with him his wife and two young sons, was presented with a miniature Austin—a J40 toy pedal car built by disabled miners.

To deal with the constant flow of visitors, the Austin Motor Co. maintains a full-time reception organisation comprising some twenty-five people whose job it is to see that visitors enjoy the time spent as guests of the company. Specially trained guides walk a total of anything up to 30 miles every day explaining the intricacies of the vast Austin plant. Caterers prepare morning coffee, luncheon and tea, and serve it in special visitors' dining-rooms. The Reception Officer himself, Mr. Tom Welch, deals with an average of 5,000 letters a year.

## A PREVIEW OF THINGS TO COME

What happens when a youth goes on his National Service? Twenty young men from Port Sunlight recently went to see for themselves. They were members of a group attending the pre-National Service course arranged by *Lever Bros.* in conjunction with Western Command. The purpose of the course is to give tomorrow's recruit a brief insight into the life he will lead when called up.

## Jubilee Gesture

TO mark their Jubilee year, *Brook Motors Ltd.*, of Huddersfield have begun an employees' gratuity scheme for those who are not on the present staff pension scheme. The new scheme will be operated in conjunction with an insurance company and the entire cost will be borne by the firm. In the case of men it will apply to all those between 30 and 59 years of age, whilst for women the appropriate age group will be 30 to 54. All in the new scheme must have had at least two years' service with the firm.

## Weeding-out Process

WHEN a life insurance company wants to recruit a salesman, an average of 220 replies to Press advertisements must be "processed" in order to find one suitable applicant. This, at least, is the experience of the *Manufacturers Life Insurance Co.*, as described in a recent address by their United Kingdom manager, Mr. C. F. Wood.

He told the Manchester branch of the Incorporated Sales Managers' Association that when the company's anonymous but rather attractive advertisement is inserted in the *Daily Telegraph* they draw an average of 120 replies. From *The Times* they draw another 60. These two advertisements together are insufficient, on the average, to produce one satisfactory man.

Assuming that they advertise more widely and draw 220 applicants, they then send out personal questionnaire forms, which are completed and returned by only half the applicants. Of these 110, an average of thirty-four are selected for interview. Most of the thirty-four are seen only once and rejected, but a few of the more interesting ones are interviewed as many as half-a-dozen times, in the office, in their home environment—preferably with the applicant's wife—and in a social environment. Furthermore, the applicant's referees are interviewed personally. **(Business,** 4/54.)

## Dual-Purpose Aid

TO meet the needs of workpeople who, following illness or injury, might benefit from a course of industrial rehabilitation, the Ministry of Labour and National Service have now set up fifteen Industrial Rehabilitation Units throughout the United Kingdom.

There is a two-fold purpose to the scheme: (a) to bring back to the fullest possible measure of working fitness persons who have been sick or injured and who need help in getting back to work, and (b) to provide vocational guidance to such of these persons who may require it—in particular those whose disability prevents their resumption of their former occupation—as to the best kind of employment to take up.

Rehabilitation Units are located at Birmingham, Bristol, Cardiff, Coventry, Edinburgh, Egham, Felling-on-Tyne, Glasgow, Hull, Leeds, Leicester, Long Eaton, Manchester, Sheffield and Waddon (Surrey). With the exception of the Egham unit, which is entirely residential, and the Leicester unit, which has residential accommodation for about fifty men, they are non-residential. **(Target, 3/54.)**

## Foremen's Digest

THE 1954 edition of *Foreman* was published recently by the Industrial Welfare Society. Those concerned with supervision in industry will find much of interest in its 60 pages, the subjects dealt with including—Recruitment and Training; Safety Need Not Be Dull; How German Foremen Are Trained; What Worries New Workers?; How To Train An Understudy; The Law Requires. . . . and What does A Foreman Do? The book is edited by Messrs. W H. Bower and Thomas Fassam.

## Industrial 'Shift'

THE moving of many London families to new or expanding towns has been accompanied by a growing demand to "match" the resettled population to jobs in the new areas.

Finding the firms willing to move or expand their activities to meet the new demands for employment is, however, presenting a considerable problem which the London County Council have yet to solve. The Council hopes that all firms interested in the possibilities and advantages of establishing themselves at Bletchley, Swindon or Aveley—or indeed in any other areas where local authorities are contemplating expansion schemes, or where there are L.C.C. estates—will not hesitate to make contact with the valuer to the L.C.C.

At the suggestion of the Board of Trade, the L.C.C. Town Planning Committee are to rent a small stand at the B.I.F. at Olympia, where information can be given about the Council's proposals for decentralisation.

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# From The House Magazines . . . . . . .

### Mutual Aid

The changes announced in the Rolls-Royce Ltd. Pension Fund are indicative of the present-day emphasis in relations between employer and employee. The Fund is an example of co-operation in industry. Three nominees of the Management work together with two elected representatives of the 17,850 subscribers to administer the Fund to the best advantage of the subscribers.

The full benefits of a contributory pension fund cannot be enjoyed without continuity of service, and without such continuity a large organisation, such as Rolls-Royce is today, cannot maintain its success.

Management and employees have now been working amicably together for twenty-two years in this successful endeavour to eliminate the "scrap-heap of old age."

**(Rolls-Royce News,** 24/3/54.)

### An Eye To The Future

My outstanding thought when interviewing male applicants is that of seeking managers of tomorrow. I point out most clearly to all potential employees their responsibilities to the firm and their opportunities of progress within it. I keep these interviews as informal and friendly as possible. A chat about the applicant's hobbies and interests will bring to light a great deal of information that is vital in making a decision whether to employ him. The remark "Why have you applied for employment in our trade" often brings some astonishing answers. I also draw attention to the training schemes and display courses which give an assistant the chance to widen his knowledge.

**(Talking Shop**—*W. H. Smith and Son Ltd.*, 3/54.)

### C.D. Enthusiasts

The more advanced training of our Civil Defence Unit has reached the stage where members of the various Sections are now putting into practice what they have learnt in theory by talks, demonstrations, films and other training aids. Volunteers are displaying great interest and enthusiasm in training. All Sections are now carrying out exercises and in April a combined exercise was held which tested the strength of the unit as a whole. **(The Crosfield Chronicle,** *Spring*, 1954.)

### Safety On Wheels

Two display trolleys are the latest idea in the Safety Division's campaign against eye injuries. The trolleys are fitted with an example of every type of goggle, spectacle and face shield available in the Stores for the protection of the eyes, whatever the job. The trolleys will be taken round the Areas one by one in the next six weeks so that everybody has a chance to choose the eye protection best suited for his job and to his personal preference and shape! **(Vauxhall Mirror,** 8/4/54.)

### Induction Training

A vocational school where boys spend six months being prepared for industry before choosing their careers on the basis of aptitudes shown, is a feature of *Alkali Division* training, which is designed to: 1. Introduce boys to industry. 2. Select boys who will work happily in groups. 3. Impart basic technical and manual skills, and 4. Find out to which career each boy is best suited.

**(I.C.I. Magazine,** 4/54.)

# Does Our Management Lack This 'Common Touch'?

**The Fawley project is discussed elsewhere in this issue but its success is of special significance to supervisors in this country. Here DISCUSSION LEADER comments on the achievement of the American management team, on how they maintained discipline and yet were friendly, helpful and informal—in fact, not in the least "snooty." Readers are likewise invited to comment and a guinea will be paid for each letter published.**

BEFORE you read this discussion page this month, I hope you will turn to page 523 and study the report there. This is the success story of the construction of a new refinery for the *Esso Petroleum Co. Ltd.*, at Fawley, Hants. American methods of planning and management combined with British labour to finish the job three months ahead of schedule and with a negligible amount of dispute between management and men. Labour turnover was low and interviews with the men showed that morale was high.

Many factors contributed to this success, yet I feel that it is of particular importance that we, who are concerned with good methods of management and supervision, should study closely the part played by Mr. R. Cole and his American supervisors. A picture of dynamic leadership emerges from the pages of the report—a leadership which aimed at welding management and supervisors into one closely-knit management team interlocking with teams of supervisors and men.

The main function of the supervisors was seen to be that of helping their teams to make targets in time. The supervisors spent all their available time out on the site, organising the work and the men to do it. They saw that no man stood idle and that no job was held up for lack of a man with the right skill to do it. They were always ready to lend a hand themselves. Here we see one supervisor taking the spanner out of a man's hands and there another supervisor running a special class for welders. They helped, but they did not interfere. There attitude was—"this is your trade and it is up to you to decide how to do it. We are concerned with getting it done."

They maintained strict discipline (dismissal for late coming, for instance) but they obeyed the same rules themselves. They led where possible by example. Social distance between them and the workers was (as the interviews with the workers show) much less marked than is the normal English custom. Mr. Cole was always "Bob" Cole and many of the supervisors were known by their christian names. The workers remarked on the willingness of the supervisors to tell them all they knew and to find out if they did not know something. "English engineers are more snooty," was one typical comment. Their "strange and colourful clothes" and the way they cracked jokes all helped to add to the friendly and informal atmosphere which was felt by everybody to exist.

## *A Human Authority*

All this informality did not in any way "detract from their considerable authority." **They had the respect of the workers and their orders were obeyed. Their authority was based on their own skill and knowledge of the job, on the way in which they handled human and technical problems and, above all, upon the kind of support given to them by top management.** The workers were well paid; they were kept fabulously well informed about the work of the whole project; they were consulted. In a hundred-and-one different ways they were made to feel that they really belonged to the management team.

You can see for yourselves if you read this report that there were many other important factors contributing to the success of this project, but there is much supporting evidence from other leadership studies to show that the methods of leadership used by Mr. Cole and his supervisors have also been successful in other fields. Before going on to discuss this other evidence, however, I should very much like to have your views on the Fawley project. Do you think the way Bob Cole organised his supervisors was effective? Do you think the supervisors were right in establishing so informal an atmosphere? How far does this organisation and behaviour differ from the kind of organisation and methods which you use or are familiar with? **I think this a vitally important issue that we have raised and I do ask as many of you as possible to write and give the benefit of your own experience to the rest of us.**

## JOINT CONSULTATION

### Bogged Down By "Inquests"

JUDGING from the letters I have received, the "short circuiting" aspect of Joint Consultation raises problems for the supervisor. A letter from Mr. Brailsford Dean, A.M.H.C.I. is typical of many.

"A joint consultative committee must 'short circuit' the supervisor to some degree. To be effective, the works council must deal with grievances but there is always a danger that this aspect of the council's work will overshadow the constructive side. The very existence of a council may give rise to complaints which might otherwise never have developed, and complaints already discussed with the supervisor tend to be rediscussed by representatives from other departments who have no direct interest in the matter. This spreads dissatisfaction. Often it is the canteen which proves the outlet for letting off steam, and trivial complaints are kept for airing at the council meeting quite unknown to the canteen manager. He is in the unfortunate position of having to hold an 'inquest' without the 'body' for that was consumed some weeks ago.

"May I appeal to all works councils to ask for such complaints to be addressed to the department manager first and then if no action be taken to bring the matter before Joint Consultation?"

Another superintendent says, "The constitution of our committee attempts to provide for keeping supervisors in the picture. Supervisors are represented on a committee of their own which meets management before the works committee meet. So policy matters are discussed first with the foremen and supervisors."

A personnel manager is of the opinion that "the establishment of shop or departmental committees does more than anything else to keep the foreman in the picture," but "the foreman, as chairman, must be given power to settle matters affecting his own shop on the spot."

Here are some constructive suggestions, can we have some more please?

A superintendent of a large depot challenges the whole conception of Joint Consultation as "insincere." He says it is a last throw on management's part to maintain their position. "They hope Joint Consultation will keep the workers quiet."

I know many people amongst the rank and file of trade unionists have the same uneasy feelings about Joint Consultation. Where suspicion exists,, it is natural to look for the "catch." What causes this view to be held? Is the onus on management to show their good faith do you think?

Another superintendent has a problem on which he would like your help. He is chairman of a local Joint Consultative Committee in a nationalised industry. He says the chief shop steward raised the subject of the lack of enough fire-fighting equipment in one of the depots. "I took this matter up through the usual channels but there appear to be great difficulties, and six months later we are still without the equipment. The funny thing is that I have noticed a change in the attitude of the workers' representatives at the committee meetings. They argue over silly points and are always challenging what I say. Last week the chief shop steward said belligerently, "And what about that fire-fighting equipment? What are you doing about that? I have an uneasy feeling that this is at the bottom of my recent difficulties but I can do no more. It is difficult to make Joint Consultation work when so many questions have to be referred up to the line. Should I make an issue out of the incident?"

TWO QUESTIONS ON JOINT CONSULTATION

*This month DISCUSSION LEADER also invites readers' comments on the two following criticisms of Joint Consultation:—*

1. *Is It insincerely used by management?*
2. *Is too much time wasted at J. C. meetings on trivial, irrelevant matters?*

*In accordance with our usual practice, a guinea will be paid for each letter published.*

Well, can you answer this one?

**DISCUSSION LEADER**

## *Raising Foremanship Standards—5*

# Vauxhall's Four-Part Foremen Training Plan

### By A. G. THOMSON

**Based on fourteen years' extensive experience in the field of foremanship training,** *Vauxhall Motors Ltd.* **have evolved a flexible, well-balanced training syllabus. Incorporating four types of courses, it can pave the way to promotion to higher grades of management.**

FOREMANSHIP training at Vauxhall Motors Ltd., begins with a selection procedure which is at one rigorous yet flexible enough to give every man a chance of an interview. Each manager and foreman is given responsibility for discovering suitable candidates purely by observation of their behaviour and the manner in which their work is carried out. In the Production Department the men selected in this manner are interviewed by a panel of three known as the "Potential Foremen Selection Committee." Anyone in the Department can apply for an interview by this panel; no psychological or personality tests are applied as such, the interview being in the form of a general conversation which may last for *three hours* or longer. **Moreover, in selecting and training foremen the company is always on the look-out for men capable of rising tc higher positions such as departmental managers.**

It is made quite clear during the interview that, during the subsequent training, should the candidate prove to be unsuitable, he would go back to his original job. And on no occasion has any dissatisfaction with the Committee's decision been expressed by any man who failed to make the grade. The man in question has always agreed that he was given a fair trial.

Four classes of training schemes are in operation at Vauxhall Motors Ltd.: part-time external courses, residential courses, internal courses and T.W.I. For this last, the company uses its own part-time instructors—about a dozen in all—who have been trained as T.W.I. instructors at a Ministry of Labour Institute. (In fact, because of the numbers involved, one such course was held on the firm's premises where eight instructors were trained *en bloc* by the Ministry.) Whereever practicable, the firm's policy is not to separate during training the technical and non-technical men or factory and office workers, experience having shown that it is better to train them together.

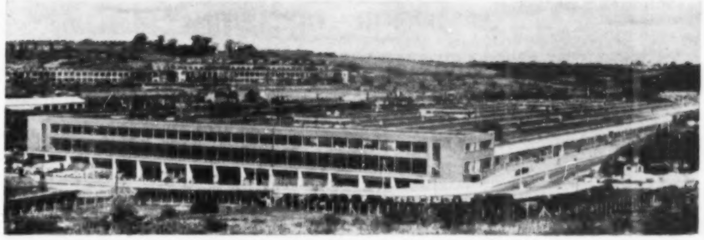
As regards part-time external courses, the firm has made extensive use of those run by the *Industrial Welfare Society,* the *Institute of Personnel Management, and the National Institute of Industrial Psychology.* These courses, it is pointed out, have the added advantage of bringing the potential foreman into contact with those from other firms with a consequent broadening of outlook through the exchange of ideas.

Vauxhall have no residential courses of their own but make considerable use of external residential training centres, particularly Pendley Manor, Tring. To date, they have sent over 120 foremen and potential foremen to the five-day course there. They also send their trainees on the three-week course at the Leicester College of Technology and to an eight-week course at Chesham College, Cambridge. Foremen nominated to attend these courses continue to receive their salaries, in addition to which the firm pays all expenses involved in their instruction.

The firm run their internal courses in a variety of ways, one method being block courses on the pattern recommended by the B.I.M. *Sub - Committee on Foremanship Training,* under which trainees go for two hours at intervals of so many weeks. Arrangements are also made for foremen to visit other companies and for outside foremen in turn to visit Vauxhall. Another facet of the internal training organisation is the Management Liaison Group which includes not only foremen, but also staff supervisors and section heads—in all, some 500 people. The Group organises regular monthly meetings of an educational character, the speakers being drawn either from the company's own senior executives or from among outside experts. In addition, the Group has an elected committee which meets senior members of the mnagement to discuss policy and company activities. Arising out of these discussions, study groups are appointed. These groups are given set training tasks based, wherever practicable, on a real-life situation. They may, for instance, have to investigate and make out a special report on a current technical or administrative problem of the firm.

These study group activities are regarded as the most important facet of Vauxhall Motors' internal foremen training activities, though much use is also made of all conventional training aids, films, charts, lectures and so forth. In practice most of the informal training facilities are for established foremen, while for trainee foremen the more formal block courses are a salient feature of the instruction. Throughout all training activities, however, stress is laid on the importance of good human relations.

A fairly long period of training, based on several years of experiment in the Production Division, has been evolved for trainee foremen. At the same time, the length of training depends on the individual in question and on whether or not he has specialised skills or aptitudes which mark him out for specialised training. With the exception of men who are trained for specialised positions, however, every production foreman in the Vauxhall plant should be capable of taking over any responsibility in his own sphere. During the initial period of training, however, the man goes through a number of production divisions, studies a wide variety of jobs and comes under different types of foremen. At a later stage he undertakes actual work in the various departments. For instance, a production man might spend some time on planning, time study, progress chasing, budgetary control, etc., not with the intention of becoming a planning engineer or a progress man, but with a view to understanding the difficulties and duties of other departments and so co-operate effectively with them.



A 'bird's eye" view of Vauxhall's latest extension block. Adding some 832,000 sq. ft., principally to the firm's manufacturing facilities, this type of development underlines the importance of supervisory training.

At the end of this period of training—which generally lasts some eighteen months to two years—the trainee is allocated to an area as foreman. His subsequent training will then depend on the area manager. There is no need, however, to test him when his training is ended as he will have been assessed continuously throughout his training period. But when he has become a foreman proper every opportunity will be taken of placing him on further courses, for it is expected that, by this time, he will be more receptive.

**Vauxhall foremen receive no bonuses, but are paid salaries—in all cases monthly—which are well above those of the men working under them.**

During the past eighteen months, it has become standard practice for all established managers and foremen to attend a weekly conference on some aspect of the business, e.g., quality, trade union relationships, cost research, budgetary control, assessment of people, etc. These conferences occupy precisely one hour and comprise mixed groups of approximately twenty-five supervisors in each. If a subject warrants, more than one conference is devoted to it, but this is not frequently the case.

Programmes are arranged by a Planning Panel consisting of six or eight senior managers representing various departments. There are two conference leaders operating almost full-time; they work from training manuals prepared in consultation with the members of the organisation responsible for the subject or function being discussed, e.g., chief inspector, personnel manager, cost research manager, etc.

These conferences have proved an effective method of ensuring that managers and foremen are up to date in regard to industrial trends and company procedures and that there is a maximum of understanding as between the various departments.

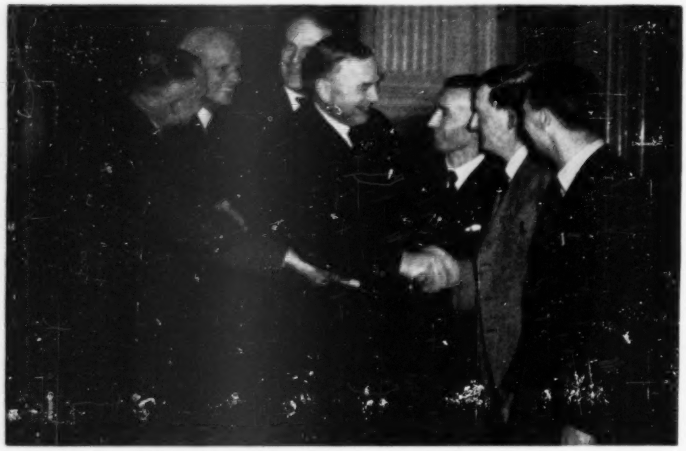
Vauxhall Motors also operate a five-year apprenticeship scheme for people between the ages of 16 plus and 21 plus. A number of them become craftsmen and technicians and a number make their career in the manufacturing department. There should be very good material here for consideration by the Selection Committee at some stage, and the firm are now trying to introduce into the final stages of their apprenticeship some knowledge of management subjects. In the years ahead this should certainly provide a substantial pool of recruits for foremanship training.

After fourteen years of well-organised foremanship training, Vauxhall Motors are satisfied that their training methods maintain a correct balance between imparting knowledge and fostering aptitude. Training policy is nevertheless constantly being modified in the light of experience, and the firm is always ready to examine and, where proved valid, to adopt new ideas and techniques.

## SIX TRAINING POINTS

1. *Foreman trainees are selected on the assumption that they could rise to higher managerial posts.*
2. *Part-time external courses are widely used to give the candidate a broader view.*
3. *Reciprocal visits are arranged between trainees from other firms.*
4. *During the initial training period, the trainee studies a variety of jobs, and works under different foremen.*
5. *The Vauxhall foreman is paid a monthly salary well above the wages of his subordinates.*
6. *All established managers and foremen attend a weekly conference on some aspect of the business, e.g., trade union relationships, cost research, assessment of people, etc.*

## A 'MAJOR' OCCASION



Sir Graham Cunningham, chairman and managing director of *Triplex Safety Glass Co. Ltd.*, welcomes new members of the firm's "21 Club." Membership of the club covers employees with 21 or more years' service.

### S.I.C.D.O. 1954 Officers

AT the first annual general meeting of the Society of Industrial Civil Defence Officers, held on March 25, 1954, at the Charing Cross Hotel, London, the officers and Council for 1954 were elected as follows: **president,** Maj.-General J. S. Lethbridge, C.B., C.B.E., M.C.; **chairman,** Mr. A. G. H. Brend, *British Electricity Authority;* **vice-chairman,** Mr. N. V. Craig, C.B.E., *The United Steel Companies Ltd.;* **hon. treasurer,** Brig. A. J. M. Wilton, O.B.E., *Bowater Paper Corporation Ltd.;* **hon. secretary,** Mr. H. P. Moll, *Shell-Mex and B.P. Ltd.*

The new Council are: Major J. C. W. August, *Pilkington Bros Ltd.;* Mr. R. Cruickshank, *Bradford Dyers Association;* Mr. S. G. Fry, *Imperial Tobacco Co. Ltd.;* Mr. R. A. Harman, M.A., *Imperial Chemical Industries Ltd.;* Group Capt. K. A. Meek, M.B.E., *Armstrong Siddeley Motors Ltd.;* Major E. D. Nisbet, *Sir Isaac Pitman and Sons Ltd.;* Mr. J. T. Petrie, *Unilever Ltd.;* Mr. R. A. Salaman, *Marks and Spencer Ltd.;* Maj.-Gen. Sir Cecil Smith, K.B.E., C.B., M.C., *National Coal Board;* Mr. K. W. Thorndyke, *Boots Pure Drug Co. Ltd.;* Mr. T. D. Tyler, *James Buchanan and Co. Ltd.;* Brig. G. G. R. Williams, *Mather and Platt Ltd.*

### New Scholarship

UNITED STEEL COMPANIES LTD., have endowed a university entrance scholarship, tenable at St. John's College, Cambridge, which will be open to candidates who intend to study physical or mechanical sciences at the College.

The scholarship will be offered annually at the open examination for entrance scholarships and exhibitions of St. John's College and the emolument will be £100 a year; but the College will be entitled to augment this to bring it up to a total value of £150. Emoluments will be paid without regard to a scholar's financial circumstances.

The firm hope that the scholars may frequently have the intention of entering industry and be of a type likely to rise to positions of responsibility therein. No stipulation, however, is made as to the future career of the scholars, although the company hope to make contact with the holders of its scholarship and that a proportion of them may desire to make their careers with them.

## IN BRIEF

Preliminary discussions have taken place between the Minister of Labour and National Service and representatives of the British Employers' Confederation on the forms of wages council and arbitration machinery in the various industries and also on the suggestion regarding the setting up of an impartial and authoritative body contained in the Reports of the Engineering and Shipbuilding Courts of Enquiry.

* * *

Students at the Sheffield College of Technology who qualified for management certificates received their awards from Lieut.-General Sir Ronald Weeks, chairman of the National Advisory Council for Industry and Commerce, at a recent ceremony of the Institute of Industrial Administration.

* * *

To celebrate the completion of 25 years' successful working at Dagenham and the good results obtained in 1953, Ford Motor Co. Ltd. made a payment of £10, subject to tax, to each of their employees and those of their subsidiary companies, who had not less than six months' service with the group in 1953, and were in its employment at December 31, 1953.

* * *

A total of sixty-eight awards were paid out during January and February for successful suggestions put forward under the Suggestions Scheme of H. J. Heinz Co. Ltd.

* * *

A record total of 202 cash awards in twelve months has been made under Dunlop's education scheme to their employees throughout Britain. The awards, £1,908 in all, have been given for successes in various examinations. The number of them has more than doubled since inception of the scheme some six years ago.

* * *

Burma's Cigar and Cheroot industry's Minimum Wages Council have sent its secretary, Mr. U. Kyin, on an International Labour Organisation fellowship to London to study wage policy and minimum wage machinery.

* * *

The British Rheumatic Association's pioneer hostel, at Bracken Hill House, Northwood, Middlesex, is now open and a number of firm's are arranging that the fees (from £4 15s. to £6 per week) should be paid from welfare funds.

## PEOPLE

**MR. E. A. COOK** has succeeded Mr. W. A. Davison as assistant to the personnel manager on the Factory Side at the Warrington factory of *Joseph Crosfield and Sons Ltd.* Mr. Davison is returning at the end of this month to Unilever House, London, to take up an appointment in the Personnel Division.

**MR. S. ROBERTS,** deputy general sales manager, Hoover Ltd., and director, Hoover (Washing Machines) Ltd., having completed twenty-five years' service with his company, has been made a member of the company's "Quarter Century Club."

**MR. W. H. TAYLOR, B.Sc., A.M.I.E.E.,** recently appointed Controller of Education and Personnel Services to The General Electric Co. Ltd., has now taken up his new duties. Mr. Taylor studied mechanical and electrical engineering at King's College, London, where he graduated in 1937. He obtained his industrial training as a graduate apprentice with The British Thomson-Houston Co. Ltd., Rugby.

# HOW TO PROMOTE AND MAINTAIN CANTEEN USAGE

**By H. V. BLACK**

*Function Director, Intel (Caterers) Ltd.*

**A canteen's purpose, says the writer, is to increase the "workability" of the employees. Thus, if only to justify his investment, the wise employer will insist that the food and service are such that the maximum number of workers will use their canteen. If not, it is the firm which loses.**

EMPLOYEE feeding has today, in some hands, reached the status of a science. It is based on fixed principles and is reasonably exact. Causes and effects have been analysed until they are well understood by progressive industrialists. Heartening as this information is, the facts reveal that the purpose of employee feeding is not clearly understood and positively promoted. Many canteens are like ships which, steering a rudderless course, never arrive at their port.

The purpose of a canteen is clearly to increase the workability of those employed in the undertaking. Only the company suffers or enjoys the effects of the canteen in totality and permanently—the employees only as individuals and only while they work for the company. Hence we often hear from employers, "I provide a canteen and if half my employees don't bother to use it—that's their loss." But it is really the company's loss.

The wrong kind of employee feeding, inside or outside the factory, is bound to affect production, product quality and personnel relations—in sum total, PROFITS. The effect will just as certainly show up on the wrong side of the balance sheet. The canteen is an effective tool of management—a vital ingredient in production—which must be properly assessed in relation to its contribution to the prosperity of the company.

Accordingly, the standards of food and service should be based upon purpose and average need and, in the employer's interests, be regarded as inviolate. That is the first requirement essential to promote canteen usage. Such standards must be paid for and the basis of determining payment be acceptable to both employer and employee who represent the *only* source of payment.

Capital, overhead and administrative costs in the canteen—which in many establishments are borne by the employer—are inherent and largely stable, whether all, half or quarter of the employees use it, or whether they get good, bad or indifferent food and service. Wise employers, meeting any of the inherent costs, will insist that both food and service are of a standard that will induce maximum regular usage, if only to justify their investment. Far-seeing employers will positively promote usage, that being the only way to ensure a dividend on the investment, which good business and positive management will rightly and justifiably demand.

## *Tell The Employees*

And what of the employees? They should know what share of the costs they are expected to meet, via the charge prices they are asked to pay. Details of income, and such costs as it is expected to cover, should be presented regularly if confidence in the prices charged is to be gained and regular usage increased. Given such confidence, adjustments in charge prices, necessary as a result of circumstances beyond the control of management, will be readily understood, willingly accepted and met by the employees. **To try to keep a constant charge price by manipulating the quantity or quality of the food or efficiency of the service is the first step on the road to discontent, and will, in the end, defeat the purpose for which the canteen was intended.**

In equity, any excess to the canteen standard cost in which the canteen is involved, as a result of any of the following, should be borne by the company:

- (a) Concessions on establishment price made to juniors, visitors, etc.
- (b) Special services introduced to meet a particular company need.
- (c) Faulty canteen layout, equipment or design.
- (d) General structural difficulties in the establishment as a whole.

Otherwise, unless specially provided for, the employees would be expected to pay, via the charge prices, for such excess costs which they in no way occasioned.

To the majority of employees, food, however essential, occupies an unimportant place in the pattern of "satisfactions" representing their particular standard of happiness. To the starving man, food enjoys, during the period of hunger, an importance far transcending that of any of the non-essential desires. To the individual who eats with fair regularity, however badly, and obtains his meals without considerable personal effort, food has little appeal value in comparison with the host of desires from the satisfaction of which he obtains positive pleasure.

An example of this is to be found in the large-scale purchase of television sets during the Coronation Year, when many of the purchasers had to resort to hire purchase facilities to gratify this particular new desire. From incomes already fully budgeted, a further 2s. to 3s. per day had to be found. There is little doubt that the food *need* was sacrificed in the process. *The employee, denying himself a nutritious midday meal and making do with sandwiches brought from home, was a common example during that period.* There are numerous other examples which amply evidence the same process—the reduction in food consumption when cigarette prices were first substantially increased, or earlier still, when cosmetics were first taxed, are but two of many

—(*continued overleaf.*)

### 4 FACTORS IN EMPLOYEE CATERING

1. Regard your canteen as an aid to greater output.
2. Tell your workers the details about canteen income and costs.
3. If your canteen does not pay for itself, meet the losses—it will pay you dividends in other ways.
4. Don't cut your standards of food or service. Money saved in this way is a false economy.

actual examples. (The writer is well aware that all human progress hinges upon the expansion and gratification of desires and that if life had progressed only upon the satisfaction of needs, we would today be enjoying only the standards of prehistoric man—thus no criticism of "desires," their expansion and satisfaction is made nor intended.)

If we accept that most employees made some sacrifice of food, because of its low appeal value, in order to gratify desires which exercise a high appeal, then it must logically be accepted that the sacrifice is made at the expense of the physical well-being of the employee. That state of affairs could and may be regarded as a matter which solely concerns each individual. However, as national economic well-being derives from the contributory effort of each individual, the importance of patterns of "satisfactions" cannot be so restricted.

Nothing will more greatly benefit the employee (and ultimately the employer) than regular consumption of good nutritious food and that conviction could very well serve as the central thought around which a new educational and marketing programme for canteen usage could be woven. Employers, determined to achieve a successful canteen, could, of course, enlist the services of their advertising agents for this purpose. Such an arrangement would, however, involve a relatively excessive cost if operated only in the interests of one establishment.

There is a strong case, therefore, for the organisation specialising in employee feeding, who design for their clients' application, a variety of plans to meet the needs here stated, many of which are available free of all cost to their clients..

Providing good nutritious food is only half the battle—winning it only results from the *maximum regular consumption* of the good nutritious food provided.

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## WORLD'S INDUSTRIES ON SHOW

MORE than 1,500,000 visitors are expected at the Lille International Trade Fair this year (May 1-16). The Fair, open to all industries from all countries, will occupy 240,000 sq. yd. and will comprise some 3,500 exhibitors. A Fair Identity Card, giving the bearer special facilities and fare reductions, can be had from French Consulates and the main travel agencies.

Copies of *Personnel Management, Welfare and Industrial Equipment* can be seen on the Technical Press Stand in the Grand Palace of the exhibition.

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# CANTEEN ADVICE BUREAU

**This is a special service run by this journal in the interests of efficient industrial catering. All readers with a canteen problem or query are invited to send these to the editor. They will be answered by L. Banham, A.R.San.I., A.M.H.C.I., an expert in this field, and a selection printed in each issue.**

## Canteen Rations

*What are the present Allowances of Rationed Foodstuffs for Industrial Canteens Categories "A" and "B"?*

| *Commodity* | *Category "A"* | *Category "B"* |
|---|---|---|
| *Bacon* | | |
| per breakfast | 5/14 oz. | 5/14 oz. |
| per main meal | 5/28 oz. | 5/28 oz. |
| per light meal | 5/112 oz. | 5/112 oz. |
| *Cheese* | | |
| per meal | 3/14 oz. | 3/14 oz. |
| *Fats* | | |
| Butter | ¼ oz. | ¼ oz. |
| Margarine | 5/16 oz. | 5/16 oz. |
| Cooking fat | 1/8 oz. | 1/8 oz. |
| *Meat* | | |
| per main meal | 6½d. worth | 3s. 3·4d. w. |

N.B. There is no difficulty in obtaining extra bacon, cheese, margarine or cooking fat since off-ration sales are permitted after ration requirements have been satisfied. Margarine may be taken in place of all or part of the allowances of butter and/or cooking fats. Cooked gammon, ham, shoulder, belly and streaky which are ration-free and three times as much Category "F" bacon (i.e., fat bacon not suitable for domestic consumers.)

*Cake and Flour Confectionery Priority Scheme.*

Fats per 1,000 light meals. 4¼ lb.

## Free Consultation

*We are considering adding to our existing canteen kitchen equipment and apparatus. Do you consider it advisable to pay for specialist advice in this matter?*

IN many cases there is no need to pay for advice on this alone as there are several catering equipment manufacturers which offer a free service in this direction. The staff who perform this work are all experts in this field. Again, the local Gas Board and the Electricity Board are usually only too pleased to be of service in the matter of planning and adding to existing cooking facilities.

## Which Fuel?

*We are contemplating the installation of some additional items of cooking apparatus. Do you advise buying gas-heated or electrically-heated apparatus?*

IN certain parts of the country the price of gas compares unfavourably with electricity while in other parts of the country the reverse is the case. It is always a wise plan to seek the advice of the local Gas Board and the Electricity Board to get some guidance to tariffs. Where it is possible to use surplus steam from the factory then it is best to cut fuel consumption by using steam to operate steaming-ovens, steam-jacketed vegetable boilers and steam-heated hotcupboards. Whether to choose gas or electricity for ovens, fish fryers, grills and boiling rings is a matter of individual preference, initial costs, fuel consumption costs and maintenance costs.

## How Much Equipment?

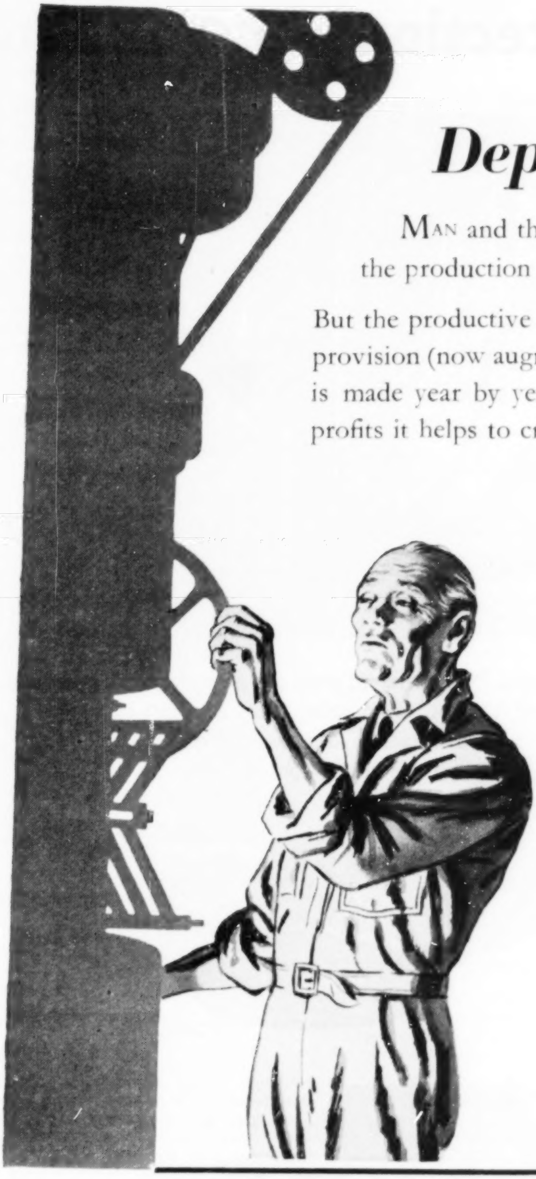
*Where can we get a list of cooking equipment sufficient to provide* 300 *midday meals?*

THAT excellent book issued by the Tea Bureau at 7s. 6d. "The Small Canteen" gives some useful lists of equipment and apparatus suitable for various sizes of canteens. It must be borne in mind that the difference in types of menus and service have an effect on the type of equipment needed. One of the most effective ways of determining whether or not you have enough equipment is to start by drawing up sample menus to cover a period of four weeks. The head cook ought to be in a position to say if more equipment is needed after considering these menus in relation to the number of people to be served. Any catering equipment manufacturer would gladly send you a list of equipment and utensils suitable to your needs.

## Kitchen Layout

*Is there any special point in grouping the cooking apparatus in the centre of the kitchen?*

IT is not vital that cooking apparatus should be sited in the centre of the kitchen but is usually permits easier working if this is done. There is, too, the added advantage that it is possible to carry off unwanted fumes and steam by use of a single canopy fitted with an extractor fan. Sometimes it is necessary to fit the canopy with lighting and sometimes it is found advisable to have the canopy made of glass. Another factor in the good positioning of apparatus is the relationship to time-and-motion study, attention to which will reduce labour costs. Too much walking about wastes time and energy while, on the other hand, it must be remembered that working in a too confined space leads to congestion, frustration, and possibly to accidents.



# Depreciation

MAN and the machine . . . the essential combination in the production of wealth.

But the productive lifetime of each is limited. Depreciation provision (now augmented by the new Investment Allowances) is made year by year in respect of every machine out of the profits it helps to create.

What of the man operating it? Unlike the machine, he cannot be scrapped at retirement age. On the contrary, he may expect to live another 12 years . . . but his State Pension will only be 32/6d. per week.

Complete, systematic retirement provision for all employees is quite as necessary as provision for depreciation of plant . . . and should, in the same way, be made in advance.

On questions of INSTALLING, SUPPLEMENTING, or MODERNISING pension provisions, the largest and most experienced pension consultants in the British Commonwealth are at your service.

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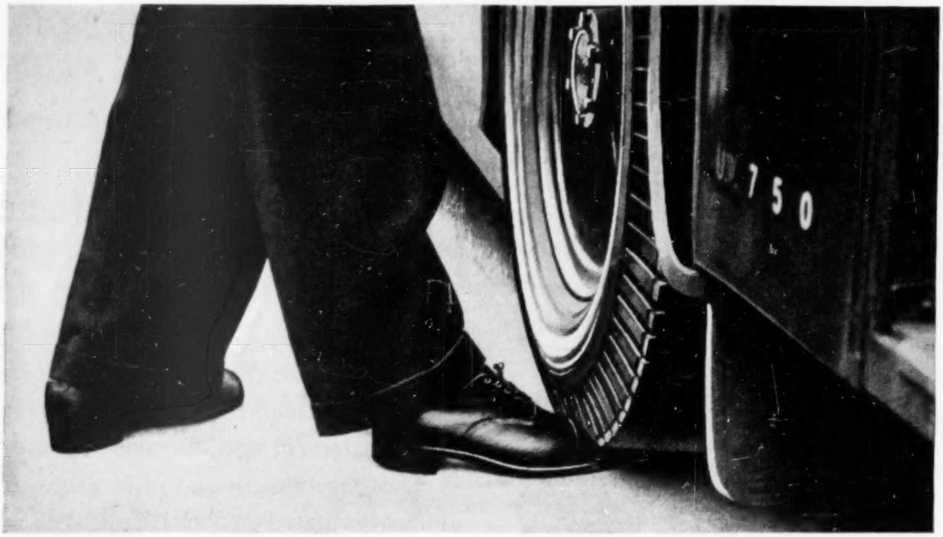
*Enquiries will be dealt with in confidence and without obligation by the Managing Director*

## *The Noble Lowndes Pension Service*

38 LOWNDES STREET · LONDON · S.W.1 · TELEPHONE SLOANE 3465 (10 LINES)
3 NEWTON PLACE, **GLASGOW**, C.3 · 25 CROSS STREET, **MANCHESTER**, 2 · 9 TITHEBARN STREET, **LIVERPOOL**, 2
12 EASY ROW, **BIRMINGHAM**, 1 · 7 SOUTH PARADE, **LEEDS**, 1 · 21 COLLINGWOOD STREET, **NEWCASTLE**, 1
58 HOWARD STREET, **BELFAST** · 39 KILDARE STREET, **DUBLIN** · And at **JOHANNESBURG, SALISBURY** and **BULAWAYO**

*Associated Companies in New York, Chicago, Los Angeles and Montreal*

Here's foot protection for you !



Even a bus weighing 7 tons 5 cwts. (as proved by our recent test) can pass over your foot without injuring it if you are wearing a pair of TOTECTORS safety boots or shoes! The neatly concealed steel toe caps are guaranteed to withstand a dead weight of 3 tons. In workshops and factories everywhere TOTECTORS are preventing foot injuries.

TOTECTORS Safety Boots and Shoes are manufactured to British Standards Institute Specification.

Safety and Welfare Officers are invited to write for literature.

*One of the large variety of styles*

WEAR

REGD.

TOTECTORS

BOOTS SHOES

THE PIONEERS OF SAFETY FOOTWEAR

WILKINS & DENTON LTD. - Dept. PM. - 51 & 52 WOBURN PLACE - LONDON, W.C.1

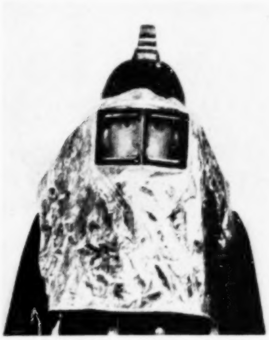
# *Safety On Parade .......*

**Each year the Trade Exhibition which is held in conjunction with the RoSPA Conference at Scarborough highlights progress at the practical level of industrial safety. The new or improved appliances to be seen at the Exhibition show how safety measures are keeping abreast of the times and how better production is linked with better protection.**

SOME thirty-seven firms are displaying their products at the 1954 RoSPA Industrial Safety Exhibition which is being held at the Vernon Road Skating Rink, Scarborough. Equipment on show will range from clogs to compressed air breathing apparatus and will include a number of new or improved appliances, and exhibitors will be glad to advise on specific safety problems. The following are certain of the new as well as of the established products which are being featured at the Exhibition.

## FACE MASK

*SIEBE, GORMAN & CO. LTD.*, will only have a photograph panel at the exhibition but they have developed this new type of aluminium foil face mask for protection against heat. The mask makes use of the property of aluminium foil of reflecting radiant heat; the windows are of mica and are easily replaceable. The mask can be readily attached to a fireman's helmet and can be worn with breathing apparatus.



## LEGGINGS, KNEE BOOTS, GLOVES

NEW developments being featured by *Wallach Bros. Ltd.* cover leggings, knee boots and safety gloves. The first of these, "Evertrusty" leggings, have a spat front and are fitted with steel springs for easy and quick attachment and removal. They are available in fireproof duck material with chrome leather spat, in all chrome leather, or in asbestos with chrome spat.

The firm's new Wellington knee boots are made from neoprene for resistance to oils, grease solvents, acids, alkalis and heats. For them it is claimed that they will withstand constant flexing and have a longer life than those made from ordinary rubber. Also in neoprene are the new unlined black seamless gloves with curved fingers and rolled ends. Men's can be had in sizes 10, 11 and 12, light, medium and heavy weights, and women's sizes 7½ to 9½ in light weights and sizes 8½ to 10 in medium and heavy weights.

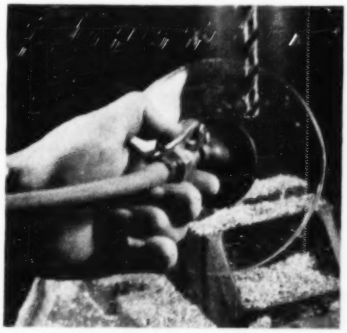
*Wallach Bros.* will also be displaying a special new safety material, cream coloured and similar to a drill but with a silky finish. This new yarn is said not only to be flame proof but to withstand all acids, tests carried out by the firm themselves having proved very successful.

## DANGER LOCKED UP

J. *BROUGHTON & SON (Engineers) LTD.* are showing a number of fairly new products including their electronically controlled hand dryer. Safety devices being featured are security file handles, self-ejecting chuck key for both drill and lathe chucks, illuminated face screens, and a delay bolt to keep machines enclosed in cases where "overrun" takes place after the power has been switched off. In this last, the bolt unit contains the bolt, electrical switch and delay mechanism and is arranged so that when the bolt has been released, the motor is at once switched off and withdrawal of the bolt (which is entirely automatic) commences under control of the delay mechanism. The delay for complete withdrawal can be set for any period between 4 and 77 seconds.

## EYE PROTECTION

ON view for the first time at the RoSPA exhibition is the entire "Cleervue" range of safety guards made by the *Silvaflame Co. Ltd.* Other new guards will also be shown but at the time of going to press details were not available. Among the "Cleervue" range, however, is a new "Blastguard" for fitting to compressed air nozzles when cleaning jigs and fixtures. It is claimed that the "Blastguard," which has a flexible rubber mounting, enables such cleaning operations with compressed air to be carried out safely, the risk of eye injury being virtually eliminated.



## BARRIER CREAMS

ON show at the stand of *Rozalex Ltd.* will be four new barrier creams which are the result of the firm's research against dermatitis risks. For the moment these new creams will be recommended for use in selected cases only. Visitors to the exhibition, however, are invited to visit the stand where advice will be freely given in methods of combating dermatitis in their own particular industries. Also developed by the firm is this new dispenser to ensure that the worker receives a controlled and uncontaminated supply of barrier cream whenever required.

ROZALEX
DISPENSER

## ELEGANT PROTECTION

UNTIL recently "safety footwear," which is practically indistinguishable from normal, has been designed for male workers only. Now *Protective Footwear Service Ltd.* has introduced a range of such safety footwear specially created for women. These shoes, known as *Nifties*, now make available to women a shoe which is

protective yet, at the same time, distinctive.

*Nifties* incorporate a concealed steel toe-cap which withstands falling weights of up to **40** ft./lb., whilst the special construction guards against the many ailments that result from illfitting and unsuitable footwear. They are sold only through welfare departments and internal industrial organisations.

## MOPS AND COVERS

RECENT developments being shown by *Plysu Products Ltd.* include a heavy-duty wet sponge mop, flexible gaiters and machine covers. The heavy-duty mop has a moulded aluminium head and a deep sponge head, **36** sq. in. in area; the sponge can be replaced in a few minutes and the water wrung out of it by a simple finger-tip folding action. It can also be used for polishing with liquid wax.

The firm's machine covers are all welded from specially-compounded clear P.V.C. sheet (.**004** to .**01** in. thick) and are claimed to be permanently flexible and to resist most chemicals.

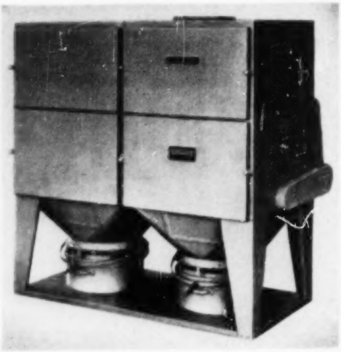
## FOOT SAFETY

AMONG the many new lines of industrial footwear in this year's productions, *Allen and Caswell Ltd.* have introduced an attractive design for ladies with internal steel toes, and a smarter men's model for executives, also a dual-purpose moulder's boot with internal steel caps. Another new feature is a special "Safirst" acid-proof boot with Neoprene oil resisting soles for chemical works.

# *New Products At The 1954 B.I.F.*

## DUST COLLECTORS

EQUIPMENT being exhibited by *Dallow, Lambert and Co. Ltd.*, will include, for the first time, their new auto-shaker which will be shown in operation, fitted to a *Dustmaster* unit dust collector. This device comprises a slow-speed geared motor and the necessary control gear, which is interlocked with the fan motor. When the fan is switched off during a break period, the shaker remains in operation for a set period of time and re-sets itself after completion of the cycle. During this period it is impossible to restart the fan. Also on view on the company's stand will be a pneumatic conveying plant, a range of *Dustmaster* unit dust collectors, comprising the DM **50**, **100** and **150** series, and a new ME **10/6** *Multiswirl* wet collector.



## "MIGHTY MIDGET"

ON view for the first time at the B.I.F. will be this midget fire extinguisher by *Savant Chemical Laboratories Ltd.* It is claimed to be the only one of its size in the world using the new chemical chlorobromomethane and to have an extinguishing power some five times that of the old-type fire extinguisher. The midget model sells at **39**s. and chrome-plated models with enamel tops are available at a small additional charge. Each model carries a twenty-year guarantee.

A NEW STAR
KWIK THE MIGHTY MIDGET

## POWDER SOAP DISPENSER

FOR cleaning excessively dirty hands a dispenser discharging a powder cleansing agent will be displayed by *Borax Consolidated Ltd.* Whereas some powder hand cleaners rely upon pumice, sand or sawdust to provide an abrasive action to cut oily films on workmen's hands, *Boraxo*, the new dispenser, obtains the same effect with borax grains which gradually dissolve and do not scratch the skin. Chemically, the soap used is stated to be milder than baby soap because of the effect of borax in reducing the *p*H value when added to a soap. The steel dispenser is finished in white vitreous enamel, and incorporates only one moving part, consisting of a steel rod. There are no springs or rubber connections.

## NEW DESKS

G. *A. HARVEY & CO. (LONDON) LTD.* will be exhibiting this year an entirely new range of steel desks and tables. These have been designed on the unit principle and from seventeen interchangeable units over **300** varieties of arrangement can be built. Also on view will be steel plan cabinets, card index cabinets, cupboards, clothes lockers, stationery cabinets, waste paper tubs, book and letter racks, letter trays, adjustable storage bins and shelving.

*(Continued on page* **539**, *col.* 2)

# *New Industrial Equipment*

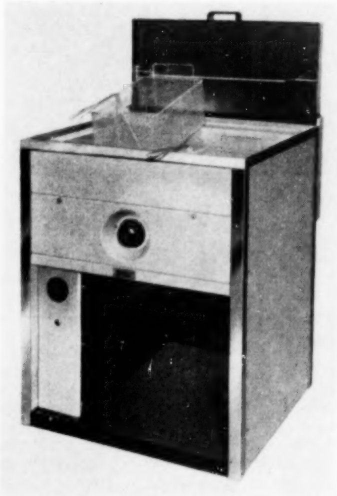
## EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

**Readers who wish to know the suppliers of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph. We are always glad to consider for publication descriptions—preferably accompanied by an illustration suitable for reproduction—of new products.**

## *Canteen*

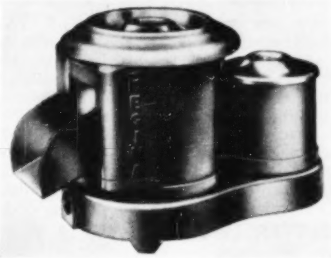
### NEW FISH FRYER

THIS new compact fryer, designed for quick frying, has recently been introduced. Thermostatic control ensures that frying is carried out at the correct temperature, reduces waste of the frying compound to a minimum and economises in the use of electricity. Supports hold the baskets after frying so that all surplus fat is drained directly back into the pan. The fryer is a single-pan A.C./D.C. unit, the body of which is constructed of heavy gauge mild steel, formed to carry a welded heavy gauge steel pan. Cartridge elements, which can be readily withdrawn without the pan having to be emptied, provide direct heating of the fat or oil. The fryer is finished in mottle grey vitreous enamel with polished chromium plate angle supports. **(PM/772.)**



### HANDY PEELER

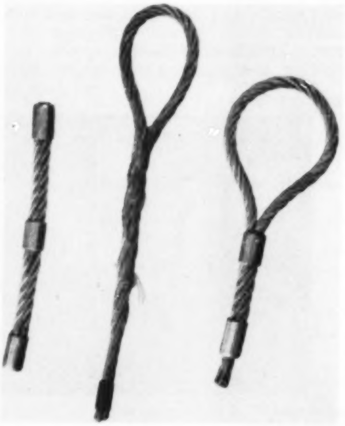
THIS new electric potato peeler has been designed to meet the needs of the smaller caterer or to serve as a handy auxiliary in large kitchens. Robustly constructed, and powered by a $\frac{1}{4}$ h.p. electric motor, it is claimed to peel 7 lb. of potatoes in just over a minute, and to be easy to operate and maintain. The peeling chamber is sealed by turning the top rim to the "stop" provided, and a turn in the reverse direction automatically ejects the peeled potatoes—no door or fastening handle has to be manipulated. The inner rotating chamber is of spun aluminium, and the whole is finished in grey mottled stoved enamel. **(PM/773.)**



## *Safety*

### SAFER WIRE-SPLICING

A NEW automatic method of splicing wire rope has recently been introduced. It is claimed to have many advantages, the first being that there are no ends of wire to cut hands and inspection is easy at all times. Secondly, it is not a system of clamping but a splice and is said to be usable on wire rope from 1 in. to 5 in. in circumference. Thirdly, after considerable tests both the wires and splices stood above standard breaking strain and gave complete satisfaction. The illustration shows the new method with hand-splicing in the centre. **(PM/774.)**



### FIBRE PROTECTION

NOW available is this new moulded, vulcanised fibre helmet for welders, fully equipped with head harness with an easily adjustable positioning device. It is, claim the makers, the only helmet of its kind made in this country and complies fully with the latest British Standards Specifications. There are models to take small or large "windows." The helmet is made in one piece from $\frac{1}{16}$ in. material, and the glass holder is riveted by means of vulcanised fibre rivets thus ensuring that no metal passes right through the helmet. **(PM/775.)**

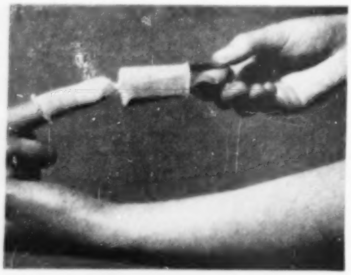
### ANTI-MISTING CLOTH

A LONDON firm is now marketing a specially impregnated, de-misting cloth for use by moulders working in foundries. Moulders' goggles, it is claimed, do not have to be damped with water before rubbing over with the new cloth. The operative simply keeps the cloth handy and, when necessary, rubs both sides of the lens as he would ordinary spectacles. The procedure is said to take only half a minute but relief from misting, lasting from twenty-four to forty-eight hours according to the heat of the premises, is obtained. The cloths last several months after which they can be returned to the makers for re-impregnation, and sent back to the user within seven days. **(PM/776.)**

## First-Aid

### A NEW DRESSING

CLAIMED to be a revolutionary method of wound dressing, a new type of bandaging has recently been introduced and is becoming extensively adopted by hospital management committees. It consists of a narrow tube of high quality cotton, having a considerable degree of elasticity, and the manner in which the dressing is applied consitutes an important feature of the dressing. In the case of a finger wound, it is slipped over a form of metal fingerstall—known as the applicator. This is placed on the finger and the bandage pulled on to the base of the finger. The applicator is then withdrawn, allowing the dressing to come away and cover the finger. Several thicknesses of bandage can be applied in this manner in a matter of a few seconds. For arm and leg dressings—or for the head—a form of cage applicator of different sizes operating on a similar principle has been devised. **(PM/777.)**



## Efficiency Aids

### EASY MARKING

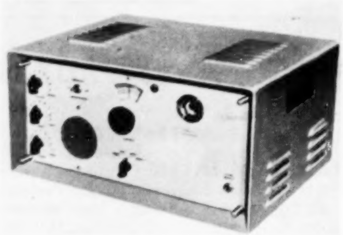
A NEW pencil claimed to be suitable for marking on wood, plastic, glass, metal, celluloid, or any smooth surface has recently been introduced. The refill which is 4 in. long is encased in a well balanced holder with push-button drop-action for increasing or decreasing point length or for refilling. It is available in black, red or yellow. **(PM/778.)**

### ELECTRIC TAPE-SHOOTER

THIS new electric tape-shooter, claim the makers, is specially designed for high-speed container sealing and can be used on large or small packages. It dispenses moistened gumstrips of widths up to 4 in., and lengths up to 36 in., a single push of the button being sufficient to dispense, moisten and cut varying or repeating lengths of tape. It also takes gumstrip wound inside and out. Four features of special interest, say the makers, are (1) the two-brush control for perfect moistening; (2) the automatic tape cut-off; (3) the ever-sharp cutter, and (4) the tape will stick instantly without excessive rubbing. **(PM/779.)**

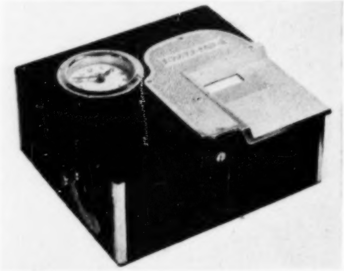
### BETTER LISTENING

DESIGNED to serve as the nucleus of small high-quality sound installations in clubs, hotels, hospitals, schools, small factories and similar medium-sized premises, a new industrial radio receiver has lately been introduced. Its numerous applications are claimed to range from normal radio reception to the presentation of disc recordings, topical discussions and announcements, as required, and covers two wavebands—200/550 and 1,000/2,000 metres. The power amplifier gives an undistorted output of 15 watts and will operate up to thirty extension loudspeakers. Radio, gramophone and microphone inputs are controlled by a centrally-mounted rotary selector switch. The receiver is available in two forms: either as a chassis model housed in a grey enamelled steel cabinet of modern design, or a panel-mounted model. **(PM/780.)**



### PORTABLE TIME-RECORDER

THIS new portable time-recorder, say the makers, is ideal for a number of business and industrial premises. Staff signatures (or other information) are recorded on a con-



### VENETIAN BLINDS FOR INDUSTRY

THE makers of these modern venetian blinds refer to their increasing use in industrial offices and factories and to the fine degree of sun and light control made possible through their use. The slatting is of a special non-rusting aluminium alloy, coated with a chip-proof long-lasting stove enamel, and is obtainable in a wide variety of colours. Another feature is the bottom rail of rigid streamlined section to conform with the shape of the slatting. The lifting cords are controlled by an automatic cord lock, no cleats or tying off being required, while special gears allow the employment of much larger diameter pulleys than is usual.

There are seven slats to each foot of blind, yet a 6 ft. drop of blind bundles to 3 in. Under pressure the slats flex but spring back into shape when the pressure is removed. Again, all mechanism is concealed in enamelled casing. The blinds are available in four models: heavy duty, standard, "Sunuminium Minor," and a special model for double glazed windows. **(PM/781.)**

tinuous record roll, 3¼ in. wide, and each roll is long enough to take 1,000 signatures. The records can be removed from the clock at any time but only by the official who holds the key.

The machine can be supplied with an eight-day, spring-driven movement; with an A.C. mains-driven movement; or with half-minute electric impulse movement, operated from the master clock, giving unified time control throughout the premises. **(PM/782.)**

## NEW INDUSTRIAL FAN

A NEW "high efficiency fan with non-overloading characteristic and having a *static* efficiency of 80 to 82 per cent." is now on the market. It is constructed of aerofoil section blades in conjunction with backward curve and well-designed fan housing which, say the makers, ensure low noise level because of the reduced turbulence of air. Manufactured in various sizes, its price it said to be keenly competitive and quick delivery assured. **(PM/783.)**

## INDUSTRIAL CHARTS

GROUP INCENTIVE CHART
A
B
C
D
E

AMONG the new charts and signs for industry manufactured by this firm is this incentive chart, consisting of magnetic letters, figures and symbols adhering to a metal background. Advantages claimed by the makers for this and other of their signs are: quick and easy setting up; no slots or holes; easy to keep clean and attractive to the eye; available in any colour or combination of colours, and figures and symbols can be used over and over again for different purposes. Application in industry covers all types and forms of visual record from raw materials to final sales. **(PM/784.)**

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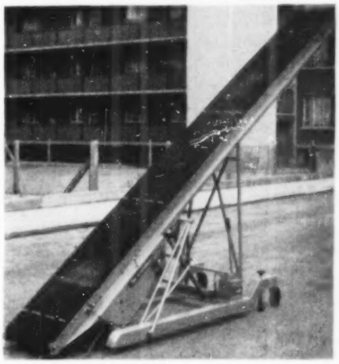
## New B.I.F. Products

*(Continued from page 536)*

### EASY LOADING

AN interesting item in the mechanical handling section will be the *LoadaVeyor*, manufactured by *J. Collis and Sons Ltd.*, for use on repeated loading operations. A light, robust appliance, it is easily and accurately moved from job to job by one man. Having a wide range of application it can be operated from the front or rear, incline or horizontally. A notable feature is the spring-counterbalancing of the boom, which enables its inclination to be adjusted easily with one hand. The boom, which is mounted on a cradle, is raised by a manually-operated, double-acting hydraulic unit. It can be manoeuvred with great ease on two rubber-tyred castors at the front and two wide-flanged ball-bearing wheels at the rear, through controls which are easy to operate and accessibly placed.



**You can get the man you want through a DAILY HERALD classified**

Employers all over the country use this medium for finding skilled replacements for every trade and craft. Why? Because of the 5,400,000 readers of this newspaper MORE THAN HALF are skilled workers. The following are typical DAILY HERALD reader groups :–

| | | | |
|---|---|---|---|
| Manufacturing and Industry | 1,060,000 | Mining and Quarrying | 280,000 |
| Building and Engineering | 580,000 | Transport and Communications | 270,000 |
| Commerce, Finance and Professions | 390,000 | Distributive Trades | 250,000 |

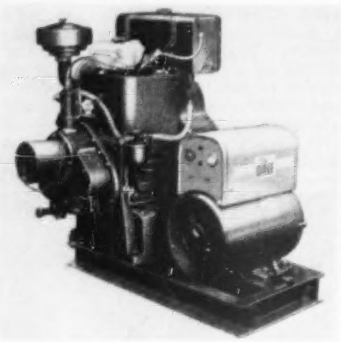
The swiftest and most economical way to secure new skilled staff is to advertise for them in the classified advertisement columns of the

**DAILY HERALD**

Rate 15/- per line. Communications should be addressed to Classified Advertisement Manager, Daily Herald, Acre House, Long Acre, London, W.C.2. Temple Bar 1200, Extensions 454 and 466.

## COMPACT GENERATOR

DESIGNED for industrial, agricultural or domestic use, a new diesel-electric generating plant is now being marketed by *Dale Electric (Yorkshire) Ltd.* Claimed to be one of the smallest of its nature produced in this country, the plant, type B/1/DX



1250W, can be arranged as a fully automatic, semi-automatic or manually-controlled type. It can also be operated as hand starting with remote stopping. The engine is a 2¼ b.h.p Petter PAZ 1 air-cooled, single-cylinder, direct-injection diesel engine, and it is rated at 1,500 r.p.m.

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THREE reasons why Germany had made such a remarkable economic recovery since World War II, said W. H. Bower, assistant director, Technical Services, Industrial Welfare Society, in a talk on *Industrial Relations in Germany*, on April 8, were:

1. The whole German nation was most conscious of the fact that they "must work or go under."
2. German managerial organisation and work planning was first-class.
3. Wherever possible, the fullest use was made of the double day-shift system.

Mr. Bower was describing his impressions of a recent tour of Western Germany. In his opinion, the German worker did not work "at a faster pace" than the British worker, but he worked steadily from start to finish of his shift.

# *Management Bookshelf*

**Psychology Applied To Human Affairs,** *by* **J. Stanley Gray** (*Professor of Psychology, University of Georgia.*) *McGraw-Hill*, 42*s*. 6*d*.

THIS is the British issue of the second edition of a book which, because it has been kept factual and objective, is a most valuable and interesting guide to a topic which is often the source of much speculation over here—namely, to what extent has America embraced psychology techniques and with what results?

The answer to the first part of the question is contained in the **568** pages of this volume which discuss practical psychology methods as applied to no less than twenty distinct branches of human activity. As to the results, these are assessed fairly: successes are noted but there is no dogmatising. The various writers are well aware that the human element will substantiate a chart or a test one day and confound it the next.

The fact remains nevertheless that psychological research can and has established much valid information about human (especially group) conduct, and this book is a first-class review of the American contribution to date in the practical aspect of the science. Those concerned with industrial relations will find the four chapters on Psychology in Industry of especial value. These deal with Work and Efficiency, Employment Methods, Training and Morale, and Wage Determination. The amount of research which U.S. industry has obviously devoted to these topics indicates a country which not only is striving for **100** per cent. efficiency but is also genuinely concerned to make workers, even in the most repetitive jobs, as happy as possible in their work.

**Retire and Enjoy It,** *by* **Cecil Chisholm** (*Phoenix House Ltd.*, 15*s*.)

"RETIRE late and taper off gradually, if you can," counsels the author in this fascinating guide for the retiree. He himself has retired twice. The first time, when he was 50, it was not a success; but the second time Mr. Chisholm planned his retirement in such a way that his days are worthily and profitably spent. In the 239 pages of this volume (which in itself is a proof of a retirement well spent) he gives his formula, which shows how to avoid becoming a vegetable and, at the same time, the worries and pressures of the business world.

The book is a mine of information, with a practical value for the personnel officer whose advice on retirement problems may be sought. For instance, details of forty-three tested ways of earning spare-time money are described, as well as details of seventy-three fresh hobbies and interests. He also points out how by judicious investment or modern annuity methods an income can be increased and how, despite inflated cost-of-living and taxation burdens, comfortable retirement is still possible. In five appendices are facts and figures on the weather, rates, typography, etc., of districts popular with the retiree, on the expectation of life at various ages, on how to start on spare-time earning, and on the "how" and the "where" of starting on new hobbies and pursuits—in fact, a statistical guide for the over-sixties.

It may be argued that no one can generalise on retirement from his own specific experience and interests. Realising this pitfall, Mr. Chisholm has kept his advice and general presentation strictly objective, quoting from personal experience only to add colour and pith to his counsels. In any event, he has succeeded in making retirement read like an adventure and not like a resignation from life. And this, of course, is just as it should be.

**Comprehensive Guide to Factory Law** *by* **Robert McKown.** *Chantry Publications Ltd.*, 21*s*.

IN this book the legal requirements affecting safety, health, welfare, hours of work, and administrative matters have been classified and indexed according to subject, irrespective of the particular legal code in which they appear. It is thus a simple matter to find what the law reqquires as regards any specific field or activity or type of plant. A special chapter on the employer's liability at Common Law has also been included—a subject of great importance to factory owners and their insurance companies.

Many industries and processes are the subject of special regulations over and above the Main Acts and where such a process is in common use (e.g., woodworking), the book gives the relevant legislation in detail. Where the process is confined to a single, highly-specialised industry (e.g., herring curing) a brief outline only is given, the reader being referred to the legal text for full details. Special attention is drawn to building regulations as these apply not only to the erection of new buildings but to alterations, repairs, maintenance and decoration of existing structures, and therefore affect factory occupier as well as contractor.

**Feminine Hygiene Problems Solved . . .**

The CANNON Sanitary Towel Disposal Bin fits unobtrusively into any corner. Completely safe in operation, its acid charge will dispose of upwards of 120 towels without fuss or odour. It is inexpensive and highly efficient. 22 inches high.

**CANNON**

SEVEN BUILDINGS, WHITE LUND
MORECAMBE

Write also for details of the Cannon automatic disinfecting and deodorising Service Scheme.

## New Thinking On Industrial Safety

(*Continued from page* 519)

**has been given too little consideration so far.**

One final point about temperament. It is a mistake to speak about people's characteristics as fixed, or, at least, as if they vary little. An individual who is disposed to be nervous is not necessarily nervous in all circumstances. In industry, for instance, it is surprisingly common to hear about a reliable and competent worker, in no apparent way mercurial, who had done his job satisfactorily perhaps for many years, but who on an unlucky day made an incomprehensible blunder. When discussing such cases we have found the word "distraction" useful. In every instance we have come across, the tried worker, when he departed from his habitual practice, was not in his normal frame of mind. He was distraught, probably because of a personal problem that was troubling him, unconsciously if not consciously. Accordingly, although scarcely one of Dr. Paterson's subjects, he went, on this particular day, too far beyond his normal threshold.

This, then, is the psychological background to the present exhibition of safety appliances—or, perhaps I should say, *part of* its psychological background. Almost all industrial accidents are caused by mistakes made by human beings. No one can seriously hope that they will make relatively fewer mistakes in the next decade than in the last. **Accordingly, the principal aim must be to reduce the consequences these mistakes will have to themselves and to others . . . in other words, to try to make it impossible for the accidents, and, in particular, the bad accidents, to happen. And that is the commendable object of this exhibition.**

## The Fawley Project

(*Continued from page* 524)

**were only three main rates: skilled, semi-skilled and unskilled. There were no piece rates. The men were very satisfied with this wage structure.** Careful attention was also paid to good amenities. The management insisted, too, that if a dispute was not readily settled on the spot with a shop steward, it should be dealt with by the area secretary. This limited the power of the shop steward, and had the effect of removing matters which might cause big differences between management and men away from the place of work. Here once more we have food for thought. As storm clouds gather on our industrial horizon, as some of the customary machinery for settling differences creaks under great stress, different approaches which have been proved successful are worth studying to see if their usefulness may be extended.

Other factors undoubtedly contributed to the success story. Mechanical devices of all kinds increased efficiency; abundant dollars and material were forthcoming as they were needed. The impressive nature of the enterprise itself created enthusiasm and interest amongst all who took part. A dynamic and forceful management took advantage of these factors, but it also added to them one further vital and indispensable factor—good leadership.

### FEBRUARY MANPOWER SITUATION

FIGURES released in April by the Ministry of Labour and National Service show that the total working population in Great Britain as at the end of February, 1954, was 23,463,000, composed of 15,930,000 men and 7,533,000 women. This compares with the total for February, 1953, of 23,312,000—comprising 15,887,000 men and 7,425,000 women.

DUNFORD COLLEGE

Richard Cobden's country home is now a Y.M.C.A. College intended especially for groups from industry (up to 20) for conference, conversations or study. People seeking quiet for research or rest are also welcomed. The house, standing in 165 acres of farm and woodland, has been modernised. Central heating; good cooking; home produce.

*Further details from the secretary*
AT
**MIDHURST SUSSEX**

Chairman: The Rt. Hon. L. J. Edwards, P.C., O.B.E., M.P.
Senior Resident: Dr. J. H. Oldham, C.B.E.

# *Summary of Official Publications*

## READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

### STATUTORY INSTRUMENTS

**No. 250. The Rubber Manufacturing Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1954.** Dated March 8, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945(a). *H.M.S.O.* 2d. (Amends Order R.U.38, by increasing the statutory remuneration fixed by that Order.) Operative from March 24, 1954.

**No. 300. The Remuneration of Teachers (Primary and Secondary Schools) Order, 1954.** Dated March 15, 1954, made by the Minister of Education under Section 89 of the Education Act, 1944(a). *H.M.S.O.* 2d. (The purpose of this Order is to secure that the remuneration paid by Local Education Authorities as from April 1, 1954, to teachers employed in Primary and Secondary Schools, is in accordance with the recommendations submitted to the Minister by the Burnham Committee in their Report dated February 24, 1954, and approved by her.) Operative from April 1, 1954.

**No. 301. The Remuneration of Teachers (Farm Institutes) Order, 1954.** Dated March 15, 1954, made by the Minister of Education under Section 89 of the Education Act, 1944(a). *H.M.S.O.* 2d. (This Order is designed to secure that the remuneration paid by Local Education Authorities as from April 1, 1954, to teachers employed in Farm Institutes, is in accordance with the recommendations submitted to the Minister by the Burnham Committee in their Report of February 11, 1954, and approved by her.) Operative from April 1, 1954.

**No. 310. The Fire Services (Ranks and Conditions of Service) Regulations, 1954.** Dated March 17, 1954, made by the Home Secretary under Sub-section 1 of Section 17 of the Fire Services Act, 1947(a). *H.M.S.O.* 3d. (Regulations amend the Fire Services (Ranks and Conditions of Service) Regulations, 1948, by providing for the following increases in pay: 7s. 6d. a week in the case of firemen, leading firemen and sub-officers; £20 a year in the case of firewomen aged 20 and over, leading firewomen and senior leading firewomen; and £25 a year in the case of station officers, assistant divisional officers, divisional officers, assistant group officers and group officers.) Operative from March 19, 1954.

**No. 329. (S.35). The Fire Services (Conditions of Service) (Scotland) Regulations, 1954.** Dated March 17, 1954, made by the Secretary of State for Scotland under Sub-section 1 of Section 17 of the Fire Services Act, 1947(a). *H.M.S.O.* 3d. (Regulations amend the Fire Services (Conditions of Service) (Scotland) Regulations, 1948, by providing for the following increases in pay: 7s. 6d. a week in the case of firemen, leading firemen and section leaders; £20 a year in the case of firewomen aged 20 and over, leading firewomen and senior leading firewomen; and £25 a year in the case of company officers, senior company officers, column officers, divisional officers, assistant group officers and group officers.) Operative from March 19, 1954.

**No. 357. The Brush and Broom Wages Council (Great Britain) Wages Regulations (Amendment) Order, 1954.** Dated March 22, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945(a). *H.M.S.O.* 8d. (Amends Orders M.67 and M.73, by increasing the Statutory minimum remuneration fixed by those Orders. Paras. 1, 5, 6 and 7 of the Schedule repeat without alteration amendments to Order M.67 contained in Order M.73, which is revoked.) Operative from April 7, 1954.

**No. 389. The Hair, Bass and Fibre Wages Council (Great Britain) Wages Regulation Order, 1954.** Dated March 25, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945(a). *H.M.S.O.* 4d. (Sets out the statutory minimum remuneration payable in substitution for that fixed by Order H.B.41, which is revoked.) Operative from April 12, 1954.

**No. 403. (S.41.) The Teachers' Salaries (Scotland) Regulations, 1954.** Dated March 26, 1954, made by the Secretary of State for Scotland under Section 79 of the Education (Scotland) Act, 1946(a). *H.M.S.O.* 1s. (The purpose of these Regulations is to prescribe the scales of salaries to be paid by education authorities to teachers employed by them in the provision of primary and secondary education during the three years beginning on April 1, 1954; and for teachers employed by education authorities in the provision of further education, to extend the period of operation of the Teachers' Salaries (Scotland) Regulations, 1951 and 1952 from April 1, 1954, until new regulations relating to their salaries are made.) Operative from April 1, 1954.

**Draft. The Coal Mines (Mechanics and Electricians) General Regulations, 1954.** Made by the Minister of Fuel and Power under Sections 60 and 68 of the Coal Mines Act, 1911(a), as amended by S.9 of the Coal Industry Act, 1949(b). *H.M.S.O.* 4d. (Part I of these Regulations requires the appointment for every mine to which the 1911 Act applies of a mechanical engineer or mechanic in charge and sufficient mechanics (and in the case of mines using electrical energy, an electrical engineer or electrician in charge and sufficient electricians), who are to be responsible for the proper installation, examination, testing and maintenance of mechanical and electrical plants. Part II specifies the duties of the mechanics and electricians of the mine and of other persons concerned with mechanical or electrical plant at mines, while Part III prescribes the qualifications required of various categories of mechanics and electricians of the mine after certain specified dates. The inspector of the division may, however, exempt any mine from the application of any provision of Part III for such period and subject to such conditions as he thinks fit.) Operative from September 1, 1954.

### INDUSTRIAL COURT AWARDS

**No. 2498. Glass Ventilator Manufacture. Reference:** To determine a difference arising between the National Union of Furniture Trades Operatives and Messrs. H. W. Cooper and Co. Ltd., concerning the rates of wages and conditions of employment to be applied to the firm's workpeople engaged in the manufacture of circular glass ventilators (a) in respect of operatives employed exclusively on glass filing and finishing, and (b) in respect of operatives doing other work in connection with the manufacture of circular glass ventilators. **Award:** The Tribunal find (among other things) that the firm concerned are engaged in the Glass Processing Industry and should observe rates of wages and conditions of employment not less favourable than those contained in the current National Rules and Labour Agreement of the National Joint Industrial Council. The Court award that the firm shall observe in relation to their glass filers and finishers and their driller the skilled time rate for the London area current under the National Rules and Labour Agreement and, if continuing to operate a collective bonus, they shall ensure that the basis of the collective bonus satisfies the provisions relating to Payment by Results contained in the said Agreement. (1/3/54.)

**No. 2499. Government Industrial Establishment. Reference:** That the payment of craftsmen employed on Survey of Stores duties shall include a responsibility allowance in addition to the basic consolidated rate of their trade. **Award:** The Court find against the claim as presented but award that the composition of the remuneration of the craftsmen concerned shall remain as at present save that the responsibility allowances granted under Award No. 1993 shall be revised as follows: First twelve months' service on the duty, 15s.; second year, 17s.; third year, 19s.; fourth year, 21s.; fifth year, 23s.; sixth year, 25s; thereafter, 27s. (8/3/54.)

### INDUSTRIAL DISPUTES TRIBUNAL AWARDS

**No. 495. Rates of Wages of Certain Workers Employed by two Warehousing Companies at Glasgow. Claim:** For an increase in wages. **Award:** That the rate of wages of the workers concerned shall be increased by 1½d. per hour. (19/2/54.)

**No. 496. Terms and conditions of Employment of Certain Workers Employed by a Firm of Corn and Agricultural Merchants in Somerset. Claim:** For the observance by the Company of the terms and conditions laid down in a specified agreement in respect of certain of their workers. **Award:** The Tribunal find that the recognised terms and conditions of employment applicable to the case are those agreed upon by the National Joint Industrial Council for the Corn Trade. The Tribunal further find that the Company are observing the aforesaid recognised

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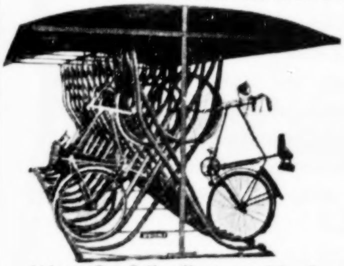

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terms and conditions of employment. (19/2/54.)

**No. 497. Rates of Wages of Workers Employed in the Manufacture of Leather Belting. Claim:** For an increase of wages of 3d. per hour for all adult workers with proportionate increases for juveniles. **Award:** That the basic rates of wages of adult male and female workers shall be increased by 1d. per hour, with proportionate increases for juveniles. (24/2/54.)

**No. 498. Travelling Allowance for Certain Workers Employed by the Northumberland and Tyneside River Board. Claim:** For travelling allowance of 5s. per week. **Award:** Claim established. (24/2/54.)

**No. 499. Observance by the Limehurst Rural District Council of recognised Terms of Employment in respect of the office of Surveyor. Claim:** Whether the Council should observe in respect of the office of surveyor the amendment to the First Schedule relating to salary scales of the Memorandum of Recommendation of the Joint Negotiating Committee for Chief Officers of Local Authorities, promulgated on August 11, 1953. **Award:** That the Limehurst Rural District Council shall observe in respect of the office of Surveyor the amendment to the First Schedule of the aforesaid Memorandum of Recommendations. (24/2/54.)

**No. 500. Rates of Wages and Other Conditions of Employment of Certain Workers Employed on Washing Fish Boxes by a Firm at Aberdeen. Claim:** For an increase of 2d. per hour on the existing rates with proportionate increases for youths from 14 to 18 years of age, two weeks' annual holiday based on one day for each month's service and overtime at the rate of time and a half to be paid to any worker called out after working hours for night shift duty. **Award:** (1) That existing rates of wages for men shall be increased by 1d. per hour, with proportionate increases for boys and youths; (2) that workers with one year's service shall receive two weeks' annual holiday with pay, those with less than one year's service to receive one day's holiday with pay for each month of service; (3) that workers called out after working hours for night shift duty shall be paid for such overtime working at the rate of time and a half. (26/2/54.)

**No. 501. Rates of Wages of Certain Workers Employed in the Wood Box, Packing Case and Wooden Container Industry in England and Wales. Claim:** For certain increased national minimum wage rates in respect of adult male workers, other than labourers. **Award:** Claim not established. (2/3/54.)

**No. 502. Remuneration of Grinders employed by an Engineering Firm at Bradford. Claim:** For an increase of 7s. 5d. per week of 44 hours under the terms of a specified agreement. **Award:** Claim not established. (3/3/54.)

**No. 503. Grading of an Officer employed by Sheffield Regional Hospital Board. Claim:** Regarding the grading of the posts held by a particular officer employed in the Sheffield Blood Transfusion Service. **Award:** Claim not established. (8/3/54.)

**No. 504. Payment to Trawler Crews at North Shields when Vessels are in Harbour. Claim:** Application by the Employers for a Revision of the Arrangements for payment to crews when vessels are in harbour. **Award:** Claim not established. (12/3/54.)

**No. 505. Victualling of Fishing Vessels operating from North Shields. Claim:** That the victualling of the vessels should become the responsibility of the employers. **Award:** The Tribunal award (1) that the employers shall be responsible for victualling fishing vessels operating from North Shields; and (2) that the present basic rates of pay for the workers concerned shall be reduced by 3s. per day.

**No. 506. Question as to the Observance of Specified Holidays with Pay Schemes by a Painting Contractor at Long Preston, Yorkshire. Claim:** That the employer should observe the agreements relating to annual and public holidays with pay in the building and civil engineering industries. **Award:** Claim established. (15/3/54.)

**No. 507. Remuneration of Lithographic Artists Employed in the Tin Box Industry. Claim:** For an increase from 7s. 6d. per week to 13s. 6d. per week above the minimum rates for lithographic artists in the paper printing industry. **Award:** That the minimum rates of wages for the workers concerned shall be 10s. 6d. per week above the appropriate minimum rates of wages for lithographic artists agreed upon between the British Federation of Master Printers and the Society of Lithographic Artists, Designers, Engravers and Process Workers. (16/3/54.)

**No. 508. Grading of a Foreman Painter Employed by the Brentford and Chiswick Corporation. Claim:** Whether Corporation should observe in respect of a named foreman painter the terms and conditions of employment determined by the Appeals and Disputes Committee of the Middlesex District Whitley Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. **Award:** That the aforesaid determination in respect of the grading of a certain foreman painter was *ultra vires* the terms of para. 1(c) of Part I of the Scheme for the Miscellaneous Classes of Officers of the N.J.C. for Local Authorities' Administrative, Professional, Technical and Clerical Services, and that the terms and conditions of service purported to be determined by the aforesaid Appeals and Disputes Committee do not, therefore, constitute the recognised terms and conditions applicable to the case within the meaning of the Industrial Disputes Order, 1951. The Tribunal award accordingly. (18/3/54.)

**No. 509. Observance of the Terms and Conditions of a Specified Agreement by a Firm of Cabinet Makers at Ipswich. Claim:** That the Company should observe the terms and conditions of employment set out in the National Labour Agreement for the Furniture Manufacturing Trades applicable to Great Britain. **Award:** Claim established. (19/3/54.)

**No. 510. Observance of Recognised Terms and Conditions of Employment by a Firm of Timber Merchants at Thirsk, Yorkshire. Claim:** For observance by the company of certain specified terms and conditions of employment. **Award:** That the recognised terms and conditions of employment applicable to the case are those laid down by the National Joint Industrial Council for the Home Grown Timber Trade which, the Tribunal award, shall be observed. (22/3/54.)

**No. 511. Terms and Conditions of Employment of a Worker Employed by the East Ham Corporation. Claim:** For the observance in respect of a worker concerned of the terms of a specified agreement. **Award:** The Tribunal find

***(Continued on page 546)***

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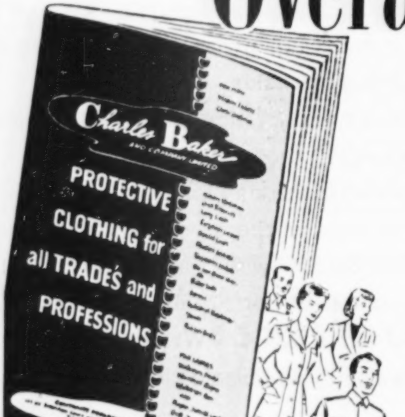
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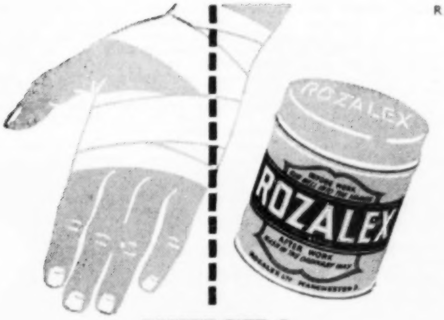

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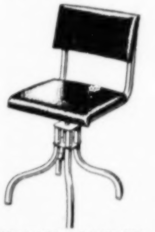

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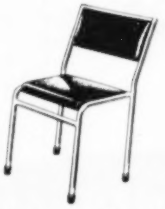

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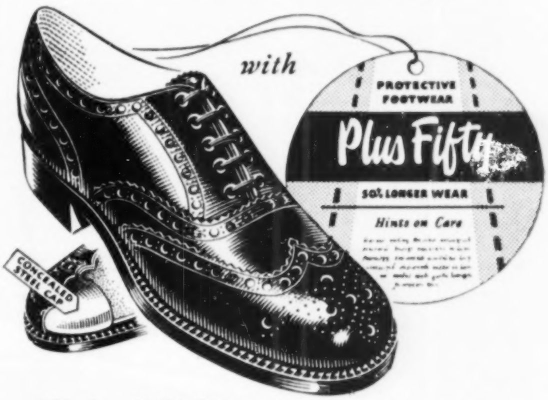

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## Summary

(*Continued from page 544*)

that the recognised terms and conditions of employment applicable to the case are those laid down in the "Working Foremen and Gangers Agreement" of the North Metropolitan Joint Council for Local Authorities' Services (Manual Workers). The Tribunal Award that the Corporation shall observe the aforesaid recognised terms and conditions of employment. (23/3/54.)

**No. 512. Rates of Wages in the Motor Vehicle Retail and Repairing Trade. Claim:** For a substantial increase in wage rates. **Award:** That the minimum rates of wages of the workers concerned shall be increased by 2d. per hour for men and by 1½d. per hour for women, with proportionate increases for junior workers. (23/3/54.)

**No. 513. Rates of Wages in the Wool Textile Industry in the West of England. Claim:** For an increase of 10s. per week for all adult workers. **Award:** That the minimum time rates and the group minimum piece rates shall be increased by 4s. per week for men and by 3s. per week for women, with proportionate increases for juvenile workers. (26/3/54.)

**No. 514. Definition of Part-Time Workers in the Domestic and Similar Grades of Staff employed in Hospitals and Institutions throughout Great Britain, Claim:** That a part-time worker should be defined as one normally required to work for less than 36 hours in a week. **Award:** Claim not established. (29/3/54.)

### GENERAL

**Civil Service Arbitration Tribunal Award No. 244. Claim:** For increased salary scales in respect of the Technical Works, Engineering and Allied Classes (London, male). **Award:** The Tribunal find for the following salary scales for the staff concerned: Grade IV, £430 to £585; Grade III, £540 to £670; Grade II, £665 to £780; Grade I, £780 to £950; Grade B, £950 to £1,065 and Grade A, £1,000 to £1,180. These scales to be subject to the normal Civil Service Conditions. (6/3/54.)

**Civil Service Arbitration Tribunal Award No. 246. Claim:** For increased salary scales (London, male) in respect of various grades in the Professional Accountant Class. **Award:** The Tribunal find for the following salary scales for the staff concerned: Accountant, £650 (at 25 years of age) to £900 (at 34); Senior Accountant, £900 to £1,220; Chief Accountant, £1,270 to £1,500. These scales to be subject to the normal Civil Service conditions. (13/3/54.)

**International Labour Conference.** Proposed action by H.M. Government in Great Britain on certain Conventions and Recommendations adopted at the 35th Session, 1952. *H.M.S.O.* 4d.

**Personnel Management** (Careers for men and women series No. 35). Provides a detailed description of qualifications, training and professional opportunities. *H.M.S.O.* 6d.

**Report of a Court of Inquiry into a Dispute between employers who are members of the Engineering and Allied Employers' National Federation and workmen who are members of Trade Unions affiliated to the Confederation of Shipbuilding and Engineering Unions.** *H.M.S.O.* 1s. 6d. Issued by the Ministry of Labour and National Service. (19/2/54.)

**Report of a Court of Inquiry into a Dispute between employers represented by the Employers' Side and Trade Unions represented by the Trade Union Side of the National Council for the Omnibus Industry.** *H.M.S.O.* 9d. Issued by the Ministry of Labour and National Service. (20/2/54.)

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21-23 **Ashorne Hill.** Annual Week-end Conference on "Education and Training to Meet the Challenge of the Changing World."

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10-14 **London.** Materials Handling and the Human Factor.

13 **London.** "Manual Lifting and Handling."

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13 & 27 **Leeds.** Progressive Course on Human Relations.

20 **London.** Celebrity Luncheon Meeting on "Industrialisation and Education."

25 **London.** "Improving the Working Environment in Shops." (Half-day Course).

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28-31 **Lilleshall Hall, Salop.** Week-end course for Officers and Members of Sports and Social Clubs on "Recreation and Industrial Morale."

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14-16 **Ashorne Hill.** "The Foreman and Cost Reduction."

### INSTITUTE OF PERSONNEL MANAGEMENT

2-7 **Birmingham.** Residential study course on "Wage Administration and Negotiation."

3 **London,** Connaught Rooms, Great Queen Street, W.C.2. One-day discussion meeting. "National Wage Negotiation."

7-9 **Eastbourne.** Annual Conference Staff Management Association. Theme "Recent Developments of Interest to Staff Managers."

10 **Glasgow.** West of Scotland Branch Meeting on "The Trade Unions' Contribution to the Maintenance of National Skills."

11 **London,** Shell Mex House, Strand, W. C. 7 p.m. "An Industrialist's View of the Work and Ideas of Personnel Officers." Speaker: The Rt. Hon. R. R. Stokes, M.P.

11 **London,** Connaught Rooms, Great Queen Street, W.C.2. One-day discussion meeting. "Re-thinking the Organisation of a Personnel Department." Speakers: A. D. Bonham-Carter, Unilever Ltd., and R. R. Hopkins, Personnel and Welfare Manager, Vauxhall Motors Ltd.

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11 **Birmingham.** "Work Study and the Production Engineer."

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3-7 **London.** Part II of Course in Direction Methods.

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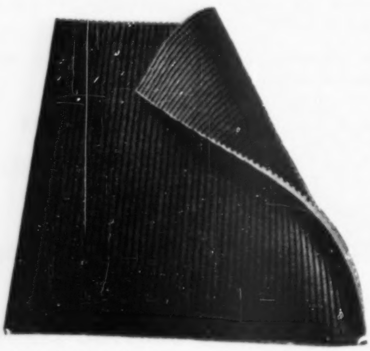

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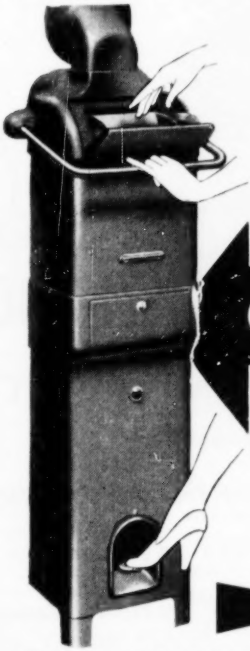

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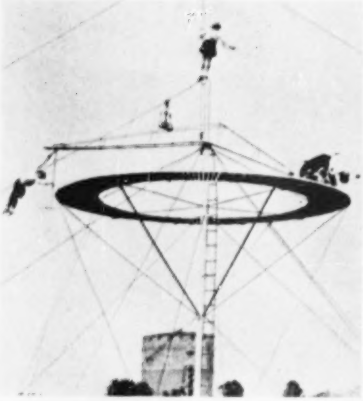

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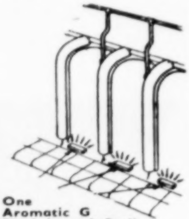

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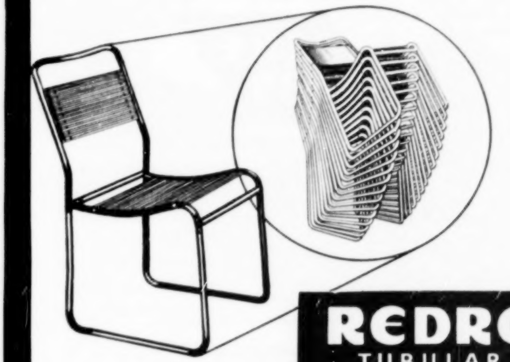

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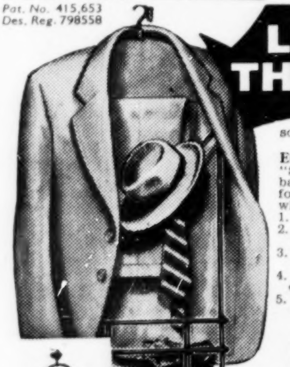

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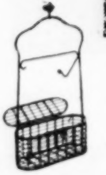

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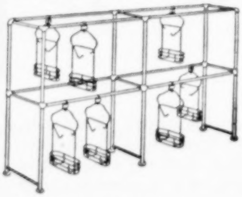

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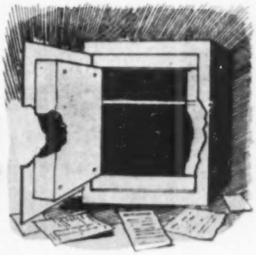

He may have been, then again he may not, but there's no question of DOUBT when watchmen are equipped with LLEWELLIN'S clocks. For the printed record is there to give the facts—to ensure that your premises are being thoroughly and regularly patrolled, and to bear witness on your night watchman's behalf that he has done his duty. By means of key-boxes situated at strategic points in your building, all of which the night watchman must visit in order to actuate the clock's mechanism, LLEWELLIN'S clocks provide a printed record of the time and regularity of watchmen's patrols. Timing of patrols can be revised any night, thus upsetting any unauthorised plan of entry into your premises based on knowledge of regular patrolling.

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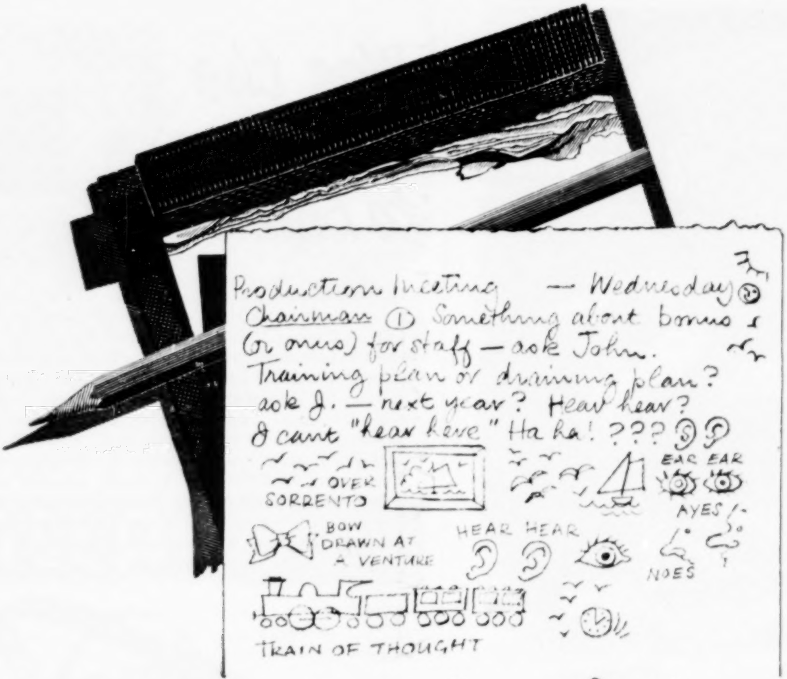

Production Meeting — Wednesday

Chairman ① Something about bonus (or onus) for staff — ask John.

Training plan or draining plan? ask J. — next year? Hear hear?

I cant "hear here" Ha ha! ???

# "Hear here" my foot —— !

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